ISSN 0039–6028

surface science

A journal devoted to the physics and chemistry of interfaces

North-Holland

FOUNDING EDITOR: Harry C. Gatos

ADVISORY EDITORIAL BOARD

CANADA:	P.R. Norton, *London, Ontario*
CHINA:	Xun Wang, *Shanghai*, Xie Xide, *Shanghai*
FRANCE:	M. Bienfait, *Marseille*, L. Dobrzynski, *Villeneuve d'Ascq*
GERMANY:	E. Bauer, *Clausthal-Zellerfeld*, G. Comsa, *Jülich*, D. Menzel, *Garching bei München*
ITALY:	G. Benedek, *Milan*
JAPAN:	Shinji Kawaji, *Tokyo*, Y. Murata, *Tokyo*
NETHERLANDS:	J.F. van der Veen, *Amsterdam*
RUSSIA:	V.A. Grazhulis, *Chernogolovka*
UK:	S. Holloway, *Liverpool*, R.M. Lambert, *Cambridge*, M.W. Roberts, *Cardiff*
USA:	J.E. Demuth, *Yorktown Heights, NY*, P.J. Feibelman, *Albuquerque, NM*, T.E. Madey, *Piscataway, NJ*, R.L. Masel, *Urbana, IL*, P.A. Thiel, *Ames, IA*, W.H. Weinberg, *Santa Barbara, CA*, R.F. Willis, *University Park, PA*, J.T. Yates, Jr., *Pittsburgh, PA*

EDITORIAL ADDRESSES:

Editor:
Dr. Charles B. Duke, Xerox Webster Research Center, 800 Phillips Road, Bldg. 0114-38D, Webster, NY 14580, USA
Telefax: +1-716-265-5080; Electronic mail: WARTHMAN.WBST128@XEROX.COM

Regional Editors:
Professor George Comsa, Institut für Grenzflächenforschung und Vakuumphysik, KFA Jülich, D-52425 Jülich, Germany
Telefax: +49-2461-58627

Professor Shinji Kawaji, Department of Physics, Gakushuin University, 1-5-1 Mejiro, Toshima-Ku, Tokyo 171, Japan
Telefax: +81-3-5391-1513

Dr. Richard M. Lambert, Department of Chemistry, University of Cambridge, Lensfield Road, Cambridge CB2 1EP, UK
Telefax: +44-223-336362; Electronic mail: RML1@UK.AC.CAM.PHX

All correspondence with the publisher regarding manuscripts accepted for publication should be addressed to:
Surface Science Technical Editors, P.O. Box 103, 1000 AC Amsterdam, The Netherlands
Telephone: +31-20-5862 526; Telefax: +31-20-5862 775; Electronic mail: RIETVELD@ELSEVIER.NL

Please do not use telefax or electronic mail for the transmission of manuscripts.

Detailed information on submission and preparation of manuscripts may be found in the Requirements for swift publication on page 3 of the cover.

Surface Science is published three times per month. For 1993, 20 volumes have been announced. The subscription price for these volumes is Dfl. 8900.00 (US$ 4944). Postage and handling amount to Dfl. 660.00 (US$ 367). Therefore the total price is Dfl. 9560.00 (US$ 5311). The price for a combined subscription to the 1993 volumes of Surface Science, Applied Surface Science and Surface Science Reports is Dfl. 12648.00 (US$ 7026), including postage and handling. The Dutch guilder prices are definitive; the currency equivalents are for your guidance only.
Subscriptions should be sent to the publisher, Elsevier Science Publishers B.V., Journals Department, P.O. Box 211, 1000 AE Amsterdam, or to any subscription agent or bookseller. Claims for issues not received should be made within six months of publication. If not, they cannot be honoured free of charge.
Books for review should be sent to Dr. C.B. Duke.

Elsevier Science Publishers B.V. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the written permission of the publisher, Elsevier Science Publishers B.V., Copyright & Permissions Department, P.O. Box 521, 1000 AM Amsterdam, Netherlands.
Special regulations for authors – Upon acceptance of an article by the journal, the author(s) will be asked to transfer copyright of the article to the publisher. This transfer will ensure the widest possible dissemination of information.
Special regulations for readers in the USA – This journal has been registered with the Copyright Clearance Center, Inc. Consent is given for copying of articles for personal or internal use, or for the personal use of specific clients. This consent is given on the condition that the copier pays through the Center the per-copy fee stated in the code on the first page of each article for copying beyond that permitted by Sections 107 or 108 of the US Copyright Law. The appropriate fee should be forwarded with a copy of the first page of the article to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA. If no code appears in an article, the author has not given broad consent to copy and permission to copy must be obtained directly from the author. All articles published prior to 1981 may be copied for a per-copy fee of US$ 2.25, also payable through the Center. (N.B. For review journals this fee is US$ 0.20 per copy per page.) This consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotion purposes, or for creating new collective works. Special written permission must be obtained from the publisher for such copying.

US mailing notice – Surface Science (ISSN 0039-6028) is published three times per month by Elsevier Science Publishers, Molenwerf 1, P.O. Box 211, 1000 AE Amsterdam, The Netherlands. Annual subscription price in the USA is US$ 5311 (subject to change), including air speed delivery. Second class postage paid at Jamaica, NY 11431.
USA POSTMASTERS: Send address changes to Surface Science, Publications Expediting, Inc., 200 Meacham Avenue, Elmont NY 11003. Airfreight and mailing in the USA by Publications Expediting.

No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Although all advertising material is expected to conform to ethical standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.

This issue is printed on acid-free paper.

Published three times per month

Printed in The Netherlands

SURFACE SCIENCE

ADVISORY EDITORIAL BOARD

E. Bauer, *Clausthal–Zellerfeld*
G. Benedek, *Milan*
M. Bienfait, *Marseille*
G. Comsa, *Jülich*
J.E. Demuth, *Yorktown Heights, NY*
L. Dobrzynski, *Villeneuve d'Ascq*
P.J. Feibelman, *Albuquerque, NM*
V.A. Grazhulis, *Chernogolovka*
S. Holloway, *Liverpool*
Shinji Kawaji, *Tokyo*
R.M. Lambert, *Cambridge*
T.E. Madey, *Piscataway, NJ*
R.L. Masel, *Urbana, IL*
D. Menzel, *Garching bei München*
Y. Murata, *Tokyo*
P.R. Norton, *London, Ontario*
M.W. Roberts, *Cardiff*
P.A. Thiel, *Ames, IA*
J.F. van der Veen, *Amsterdam*
Xun Wang, *Shanghai*
W.H. Weinberg, *Santa Barbara, CA*
R.F. Willis, *University Park, PA*
Xie Xide, *Shanghai*
J.T. Yates, Jr., *Pittsburgh, PA*

surface science

including

surface science letters

A JOURNAL DEVOTED TO THE PHYSICS AND CHEMISTRY OF INTERFACES

Editor:

Charles B. Duke, Webster, NY

Regional Editors:

George Comsa, Shinji Kawaji, Richard M. Lambert

Master Index to Volumes 281–290

NORTH-HOLLAND

© 1993 Elsevier Science Publishers B.V. All rights reserved

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the written permission of the publisher, Elsevier Science Publishers B.V., Copyright & Permissions Department, P.O. Box 521, 1000 AM Amsterdam, Netherlands.

Special regulations for authors – Upon acceptance of an article by the journal, the author(s) will be asked to transfer copyright of the article to the publisher. The transfer will ensure the widest possible dissemination of information.

Special regulations for readers in the USA – This journal has been registered with the Copyright Clearance Center, Inc. Consent is given for copying of articles for personal or internal use, or for the personal use of specific clients. This consent is given on the condition that the copier pays through the Center the per-copy fee stated in the code on the first page of each article for copying beyond that permitted by Sections 107 or 108 of the US Copyright Law. The appropriate fee should be forwarded with a copy of the first page of the article to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA. If no code appears in an article, the author has not given broad consent to copy and permission to copy must be obtained directly from the author. All articles published prior to 1981 may be copied for a per-copy fee of US$ 2.25, also payable through the Center. (N.B. For review journals this fee is US$ 0.20 per copy per page.) This consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotion purposes, or for creating new collective works. Special written permission must be obtained from the publisher for such copying.

No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Although all advertising material is expected to conform to ethical standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.

This volume is printed on acid-free paper.

PRINTED IN THE NETHERLANDS

Author index to volumes 281–290

Abbate, M., see Soriano 281 (1993) 120
Abbate, M., see Soriano 290 (1993) 427
Abbati, I., C. Mariani, C. Chemelli and M. Scagliotti, Vibrational and electronic properties of $FePS_3$ studied by HREELS and EELS 281 (1993) 127
Abernathy, D.L., D. Gibbs, G. Grübel, K.G. Huang, S.G.J. Mochrie, A.R. Sandy and D.M. Zehner, Reconstruction of the (111) and (001) surfaces of Au and Pt: thermal behavior 283 (1993) 260
Abernathy, D.L., see Grübel 287/288 (1993) 842
Abon, M., see Atli 287/288 (1993) 110
Abraham, D.L., see Spierings 287/288 (1993) 747
Abraham, D.L., see Prins 287/288 (1993) 750
Achete, C., see Niehus 289 (1993) 19
Ackermann, L., see Görling 286 (1993) 26
Adams, D.L., see Stampfl 287/288 (1993) 418
Adams, J.B., see Liu 289 (1993) L641
Aebi, P., M. Erbudak, A.P. Hitchcock, M. Szymonski, T. Tyliszczak and E. Wetli, Imaging of surfaces by means of secondary electrons 285 (1993) 275
Aebi, P., see Naumović 287/288 (1993) 950
Afsin, B., P.R. Davies, A. Pashusky, M.W. Roberts and D. Vincent, Reaction pathways in the oxydehydrogenation of ammonia at Cu(110) surfaces 284 (1993) 109
Agostino, R.G., see Caputi 282 (1993) 62
Agostino, R.G., see Caputi 289 (1993) L591
Ahner, J. and H.-W. Wassmuth, Molecular and dissociative chemisorption and condensation of SO_2 on Cu(111) 287/288 (1993) 125
Aika, K., see Kadowaki 287/288 (1993) 396
Aisaka, T., see Ishii 287/288 (1993) 299
Aiura, Y., H. Yanashima, H. Fukutani, H. Kato, Y. Sakisaka, T. Maruyama and K. Edamoto, Hydrogen-induced reconstruction of a W(110) surface studied by angle-resolved photoemission spectroscopy 283 (1993) 344
Aizawa, T., see Souda 283 (1993) 36
Aizawa, T., see Souda 285 (1993) 265
Aizawa, T., see Souda 290 (1993) 245
Akamatsu, N., see Hirose 283 (1993) 244
Akamatsu, N., see Domen 283 (1993) 468
Akemann, W. and A. Otto, The effect of atomic scale surface disorder on bonding and activation of adsorbates: vibrational properties of CO and CO_2 on copper 287/288 (1993) 104
Al-Assadi, K.F., see You 284 (1993) 263
Al Falou, A., see Horn-von Hoegen 284 (1993) 53
Al-Hayek, I. and Ş. Katircioglu, Water adsorption on the Si(110) surface 286 (1993) 92
Al-Sarraf, N., J.T. Stuckless, C.E. Wartnaby and D.A. King, Adsorption microcalorimetry and sticking probabilities on metal single crystal surfaces 283 (1993) 427
Albrecht, U., A. Otto and P. Leiderer, Diffusive two-dimensional spreading of a polymer 283 (1993) 383
Albrecht, U., P. Evers and P. Leiderer, Annealing behavior of quench-condensed hydrogen and deuterium films 283 (1993) 419
Albrecht, U., P. Leiderer and K. Kono, Surface state electrons on quench-condensed hydrogen films as a surface probe 283 (1993) 423

Albridge, R.G., see Liu 281 (1993) L353
Albridge, R.G., see Xu 289 (1993) L622
Aldaz, A., see Feliu 289 (1993) 152
Aldridge, P.S., see Taverner 287/288 (1993) 653
Alkemade, P.F.A., see Vrijmoeth 290 (1993) 255
Alleno, E., see Dubot 282 (1993) 1
Allers, K.-H., H. Pfnür, P. Feulner and D. Menzel, Associative desorption of HD and D_2 from a Ni(100) surface: angular and velocity distributions 286 (1993) 297
Almeida, T., L.E. Cox, J.W. Ward and J.R. Naegele, Gas adsorption studies on Pu metal by photoemission spectroscopy 287/288 (1993) 141
Alnot, M. and J.J. Ehrhardt, Pt(110)(1×1) surfaces prepared by low temperature platinum deposition: surface characterization and stability 287/288 (1993) 325
Althainz, P., see Aristov 281 (1993) 74
Alvarez, J., J.J. Hinarejos, E.G. Michel and R. Miranda, Determination of the Fe/Si(111) phase diagram by means of photoelectron spectroscopies 287/288 (1993) 490
Ammer, Ch., Stacking faults in epitaxy investigated by SPALEED 287/288 (1993) 964
Amoddeo, A., see Caputi 282 (1993) 62
Amoddeo, A., see Caputi 289 (1993) L591
Anazawa, T., see Edamoto 287/288 (1993) 667
Andersen, J.E.T., see Warren 287/288 (1993) 222
Andersen, J.N., see Lundgren 281 (1993) 83
Andersen, J.N., see Wigren 289 (1993) 290
Andersen, J.N., E. Lundgren, R. Nyholm and M. Qvarford, Alkali metal adsorption on Al(111) 289 (1993) 307
Andersohn, L. and U. Köhler, In situ observation of water adsorption on Si(100) with scanning tunneling microscopy 284 (1993) 77
Andrews, A.B., see Smith 282 (1993) L359
Andrews, A.B., see Herman 290 (1993) L643
Aničić, A. and B. Gumhalter, Irreversible energy transfer in ionization of physisorbed adsorbates. II. Inelastic energy spectra of temporarily ionized adatoms 287/288 (1993) 39
Anno, E. and T. Yamaguchi, Optical absorption of Ni and Pd particles: enhanced correlation interaction between conduction electrons 286 (1993) 168
Anno, K., see Kono 287/288 (1993) 1092
Anton, A.B., see Glines 286 (1993) 122
Anton, A.B., see Carter 290 (1993) 319
Antonelli, A., S.N. Khanna and P. Jena, Interplanar relaxation at the (0001) surface of Be 289 (1993) L614
Aono, M., see Nakamura 283 (1993) 46
Aono, M., see Watanabe 287/288 (1993) 1036
Aono, M., see Uchida 287/288 (1993) 1056
Apai, G., see Rhodin 287/288 (1993) 638
Apai, G., see Carter 290 (1993) 319
Arakawa, I., see Weibel 283 (1993) 204
Arakawa, I., see Kosugi 287/288 (1993) 862
Aristov, V.Yu., M. Bertolo, P. Althainz and K. Jacobi, The Ag/n-InSb(110) interface at 10 K: first observation of an anomalous Fermi-level pinning 281 (1993) 74
Aruga, T., see Fukui 281 (1993) 241
Aruga, T., see Onishi 283 (1993) 213
Asada, H., S. Doi and H. Kawano, The phase of condensate coexisting with the solid phase of nitrogen on Grafoil, studied by volumetric adsorption measurements of nitrogen 286 (1993) L554
Aseev, A.L., see Krasilnikov 290 (1993) 232

Asensio, M.C., see Dippel 287/288 (1993) 465
Ashida, M., see Liu 284 (1993) L411
Aspnes, D.E., see Hingerl 287/288 (1993) 686
Atli, A., M. Abon and J.C. Bertolini, Carbon monoxide adsorption on the (111) and (110) faces of a $Pt_{50}Ni_{50}$ single-crystal alloy 287/288 (1993) 110
Atrei, A., see Bardi 282 (1993) L365
Atrei, A., U. Bardi, J.X. Wu, E. Zanazzi and G. Rovida, LEED crystallographic investigation of ultrathin films formed by deposition of Sn on the Pt(111) surface 290 (1993) 286
Auerbach, D.J., C.T. Rettner and H.A. Michelsen, Interaction dynamics of hydrogen at a Cu(111) surface 283 (1993) 1
Aumayr, F., see Töglhofer 281 (1993) 143
Avery, A.R., see Mayne 284 (1993) 247
Avouris, Ph., see Wintterlin 286 (1993) L529

Baba, Y., H. Yamamoto and T.A. Sasaki, Core-level electronic structures of rare-gas atoms implanted in transition metals studied by XPS and XAES 287/288 (1993) 806
Bacchin, G., see Finazzi 287/288 (1993) 264
Badziag, P. and W.S. Verwoerd, Quantum chemical modeling of the scanning tunneling microscope 285 (1993) 145
Baeumler, M., see Haight 287/288 (1993) 482
Bagus, P.S., see Pacchioni 286 (1993) 317
Bailey, P., see Mikheeva 287/288 (1993) 662
Bakker, H., see Cserháti 290 (1993) 345
Balibar, S., C. Guthmann and E. Rolley, Step degeneracy and step–step interactions 283 (1993) 290
Balzarotti, A., see Motta 284 (1993) 257
Ban, T., see Sugai 282 (1993) 67
Bang, J.-S., see Park 283 (1993) 209
Bao, X., J.V. Barth, G. Lehmpfuhl, R. Schuster, Y. Uchida, R. Schlögl and G. Ertl, Oxygen-induced restructuring of Ag(111) 284 (1993) 14
Barbier, L., B. Salanon, J. Sprösser and J. Lapujoulade, Growth and ordering dynamics for Au deposition on Au(110)(2×1) 287/288 (1993) 930
Barbieri, A., see Starke 286 (1993) 1
Barbieri, A., see Van Hove 287/288 (1993) 428
Barbieri, A., see Starke 287/288 (1993) 432
Bardi, U., A. Atrei, B. Cortigiani, G. Rovida and M. Torrini, X-ray photoelectron diffraction study of an oxidized Pt–Co(001) alloy surface: evidence for atomic scale rippling of the CoO overlayer 282 (1993) L365
Bardi, U., see Atrei 290 (1993) 286
Barilo, S.N., see Mikheeva 287/288 (1993) 662
Barnard, J.C., K.M. Hock and R.E. Palmer, Intercalation of potassium from the surface of graphite 287/288 (1993) 178
Barnes, A.V., see Liu 281 (1993) L353
Barnes, A.V., see Xu 289 (1993) L622
Barnes, C.J., A. Wander and D.A. King, A tensor LEED structural study of the coverage-dependent bonding of iodine adsorbed on Rh{111} 281 (1993) 33
Barnes, C.J., see Wander 281 (1993) 42
Barnett, S.A., see Shinn 281 (1993) 1
Barrett, N.T., B. Villette, A. Senhaji, C. Guillot, R. Belkhou, G. Tréglia and B. Legrand, Experimental study of the growth and dissolution of Re/W(110) by core level photoemission spectroscopy: formation of a surface alloy 286 (1993) 150
Bartelt, M.C., see Evans 284 (1993) L437
Barth, J.V., see Bao 284 (1993) 14

Barthés-Labrousse, M.-G., see Dubot 282 (1993) 1
Bärwinkel, K. and L. Rottmann, A model for irreversible scattering of gas atoms on a metal surface 287/288 (1993) 35
Bassett, D.W., see Hutt 287/288 (1993) 1000
Batirev, I.G., A.N. Karavanov and J.A. Leiro, Surface segregation and catalytic properties of Pd–Ru alloys 289 (1993) 357
Baudoing-Savois, R., see Bugnard 281 (1993) 62
Bauer, E., see Pavlovska 286 (1993) 176
Becher, U., see Zeppenfeld 285 (1993) L461
Behm, R.J., see Kopatzki 284 (1993) 154
Behm, R.J., see Magnussen 289 (1993) 139
Beke, D.L., see Cserháti 290 (1993) 345
Belkhou, R., see Barrett 286 (1993) 150
Bell, A.T., see Shustorovich 289 (1993) 127
Bellman, A.F., D. Cvetko, A. Morgante, M. Polli, F. Tommasini, K.C. Prince and R. Rosei, The (2×2) p2mg to (1×2) O/Rh(110) phase transition 281 (1993) L321
Bellman, A.F., D. Cvetko, A. Morgante, M. Polli, F. Tommasini, V.R. Dhanak, A. Lausi, K.C. Prince, R. Rosei, P. Cortona and M.G. Dondi, He scattering from Rh(110) 282 (1993) 273
Ben-Reuven, A., see Vaksman 287/288 (1993) 196
Benndorf, C., see Mundt 287/288 (1993) 119
Bennett, S.L., see Greenwood 287/288 (1993) 386
Bennett, S.L., C.L. Greenwood and E.M. Williams, ESDIAD studies of fluorine and chlorine adsorption at Si(100) 290 (1993) 267
Bent, B.E., see Su 282 (1993) 357
Bera, S., see Sharma 285 (1993) 237
Berjoan, R., see Maline 286 (1993) 82
Berkó, A., see Solymosi 285 (1993) 197
Bertel, E., see Memmel 285 (1993) 109
Bertolini, J.C., J.L. Rousset, P. Miegge, J. Massardier, B. Tardy, Y. Samson, B.C. Khanra and C. Creemers, Surface segregation study of a dilute Pd_1Fe_{99} alloy by LEIS and XPS 281 (1993) 102
Bertolini, J.C., see Atli 287/288 (1993) 110
Bertolini, J.C., J.L. Rousset, P. Miegge, J. Massardier and B. Tardy, On the large Pd surface segregation and reactivity of Pd_1Fe_{99} and Pd_5Fe_{95} dilute alloys 287/288 (1993) 346
Bertolo, M., see Aristov 281 (1993) 74
Bessent, M.P., see Hu 286 (1993) L542
Betti, M.G., see De Renzi 287/288 (1993) 550
Bieker, T., see Selke 281 (1993) 163
Biemolt, W., see van de Kerkhof 284 (1993) 361
Biemolt, W., A.P.J. Jansen, M. Neurock, G.J.C.S. van de Kerkhof and R.A. van Santen, The oxidation of ammonia by copper 287/288 (1993) 183
Bienfait, M., see Maruyama 283 (1993) 333
Biham, O., L.-W. Chen and G. Vidali, Models for monolayers adsorbed on a square substrate 287/288 (1993) 815
Binns, C., see Dubot 282 (1993) 1
Björneholm, O., see Nilsson 287/288 (1993) 758
Blügel, S., see Rader 287/288 (1993) 736
Blyholder, G. and M. Lawless, A theoretical study of the site of CO dissociation on Fe(100) 290 (1993) 155
Boccuzzi, F., see Ghiotti 287/288 (1993) 228

Bock, W., H. Gnaser and H. Oechsner, Modification of crystalline semiconductor surfaces by low-energy Ar^+ bombardment: Si(111) and Ge(100)	282	(1993)	333
Boerma, D.O., see Dorenbos	287/288	(1993)	443
Boerma, D.O., see Breeman	287/288	(1993)	881
Bohnen, K.-P., see Rodach	286	(1993)	66
Bokor, J., see Fann	283	(1993)	221
Bolcatto, P.G. and E.C. Goldberg, Scattering of atoms by surfaces within a molecular orbital approach	289	(1993)	187
Bolmont, D., see Rouyer	287/288	(1993)	935
Bolotin, I.L., V.A. Grazhulis, A.M. Ionov, S.G. Karabashev and D.A. Shuliatev, Electron spectroscopy for (001)$Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4}$ ($n=1,2$); comparative studies	287/288	(1993)	630
Bolwin, K., see Kuch	287/288	(1993)	600
Bonnell, D.A., see Liang	285	(1993)	L510
Bonzel, H.P., see Grosche	281	(1993)	L341
Bonzel, H.P., see Sieben	282	(1993)	246
Bonzel, H.P., see Griffiths	284	(1993)	L389
Bootsma, T.I.M. and T. Hibma, A strain-relieve transition in epitaxial growth of metals on Si(111)(7×7)	287/288	(1993)	921
Borisov, A.G., D. Teillet-Billy and J.P. Gauyacq, Singlet-to-triplet conversion in low energy metastable helium–metal surface collisions	284	(1993)	337
Bormet, J., see Wenzien	287/288	(1993)	559
Bosch, S., Double layer ellipsometry: an efficient numerical method for data analysis	289	(1993)	411
Bot, A., U. van Slooten, W.R. Koppers and A.W. Kleyn, Surface diffusion during thin film annealing studied by XPS	287/288	(1993)	901
Bouette-Russo, S., see Goniakowski	284	(1993)	315
Bouette-Russo, S., see Noguera	287/288	(1993)	188
Bourget, L.P., see Brandt	286	(1993)	15
Boutin, A., B. Rousseau and A.H. Fuchs, Surface melting of a molecular crystal by computer simulations	287/288	(1993)	866
Bowker, M., see Li	285	(1993)	219
Boyd, K.J., see Marton	282	(1993)	113
Bozzolo, G., see Rodríguez	289	(1993)	100
Bozzolo, G., B. Good and J. Ferrante, Heat of segregation of single substitutional impurities	289	(1993)	169
Bracco, G., C. Malò, C.J. Moses and R. Tatarek, On the primary mechanism of surface roughening: the Ag(110) case	287/288	(1993)	871
Bradshaw, A.M., see Herman	284	(1993)	23
Bradshaw, A.M., see Tüshaus	286	(1993)	212
Bradshaw, A.M., see Gardner	287/288	(1993)	135
Bradshaw, A.M., see Lamont	287/288	(1993)	169
Bradshaw, A.M., see Rausenberger	287/288	(1993)	235
Bradshaw, A.M., see Dippel	287/288	(1993)	465
Brandt, R.K., M.R. Hughes, L.P. Bourget, K. Truszkowska and R.G. Greenler, The interpretation of CO adsorbed on Pt/SiO_2 of two different particle-size distributions	286	(1993)	15
Braun, W., see Whittle	287/288	(1993)	554
Breeman, M. and D.O. Boerma, Atomic mobilities on a stepped Cu(100) surface	287/288	(1993)	881
Brenig, W., see Gross	289	(1993)	335
Brenten, H., see Müller	284	(1993)	129

Bressler-Hill, V., R. Maboudian, M. Wassermeier, X.-S. Wang, K. Pond, P.M. Petroff and W.H. Weinberg, Surface morphology of MBE-grown GaAs(001)-(2×4) and GaAs(001)-faceted surfaces investigated by scanning tunneling microscopy 287/288 (1993) 514
Briggs, G.A.D., see Mayne 284 (1993) 247
Brodde, A. and H. Neddermeyer, Scanning tunneling microscopy on the growth of Fe films on Cu(100) 287/288 (1993) 988
Brown, N.M.D., see You 284 (1993) 263
Brundle, C.R., see Saiki 282 (1993) 33
Bu, Y., see Chu 284 (1993) 281
Bu, Y., J.C.S. Chu and M.C. Lin, Thermal stability of trimethyl indium on Si(100)(2×1) as studied with HREELS, UPS and XPS: a comparison with the results from Si(111)(7×7) and Si(110) studies 285 (1993) 243
Büchel, M., see Goerge 289 (1993) 201
Bucher, J.-P., H. Roeder and K. Kern, Thermally induced disorder and conformational defects of alkane monolayers on graphite 289 (1993) 370
Budde, F., T.F. Heinz, A. Kalamarides, M.M.T. Loy and J.A. Misewich, Vibrational distributions in desorption induced by femtosecond laser pulses: coupling of adsorbate vibration to substrate electronic excitation 283 (1993) 143
Bugnard, J.M., R. Baudoing-Savois, Y. Gauthier and E.K. Hill, The (110) surface of the disordered $Pt_{25}Co_{75}$ alloy: a sandwich of almost pure monoatomic layers 281 (1993) 62
Bullemer, B., see Kulakov 287/288 (1993) 241
Bullock, E.L., see Herman 284 (1993) 23
Bunton, P.H., see Liu 281 (1993) L353
Burchhardt, J., see Stampfl 287/288 (1993) 418
Bürgler, D., see Tarrach 285 (1993) 1
Buseck, P.R., see Sharp 284 (1993) L405
Busmann, H.-G., R. Hiss, H. Gaber and I.V. Hertel, Growth mechanisms of C_{60}-molecular beam epitaxy on mica 289 (1993) 381

Cabané, J., see Montagono 285 (1993) L468
Cafolla, A., see Whittle 287/288 (1993) 554
Calandra, C., see Zanardi 290 (1993) 141
Campbell, C.T., see Zhang 289 (1993) 1
Canepa, M., P. Cantini, L. Mattera, M. Salvietti, S. Terreni and F. Valdenazzi, Water dissociation on O(n×1)–Ag(110) phases 287/288 (1993) 273
Cantini, P., see Canepa 287/288 (1993) 273
Cao, Pei-Lin, see Zhou 290 (1993) L649
Cao, Yuming, see Wu 285 (1993) L522
Capasso, C., W. Ng, A.K. Ray-Chaudhuri, S.H. Liang, R.K. Cole, Z.Y. Guo, J. Wallace, F. Cerrina, J. Underwood, R. Perera, J. Kortright, G. De Stasio and G. Margaritondo, Scanning photoemission microscopy on MAXIMUM reaches 0.1 micron resolution 287/288 (1993) 1046
Caputi, L.S., R.G. Agostino, A. Amoddeo, E. Colavita and A. Santaniello, X-ray photoelectron diffraction study of CO- and NO-saturated Ni(111) 282 (1993) 62
Caputi, L.S., R.G. Agostino, A.Amoddeo, S. Molinaro, G. Chiarello, E. Colavita and A. Santaniello, Orientational study of low coverage CO and NO on Ni(111) 289 (1993) L591
Carbone, C., see Rader 287/288 (1993) 736
Cardona, M., see Kelly 285 (1993) 282
Carey, G.P., see Seelmann-Eggebert 287/288 (1993) 495
Carter, R.N., A.B. Anton and G. Apai, Reactions of π-allyl with atomic oxygen and hydroxyl on Ag(110) 290 (1993) 319
Casarin, M., see Vittadini 289 (1993) L625

Cassuto, A., S. Schmidt and Mane Mane, The interaction of potassium submonolayers adsorbed on Pt(111) with oxygen and the adsorption of ethylene on the resulting modified surfaces: a TDS and UPS study 284 (1993) 273
Cassuto, A., Mane Mane, G. Tourillon, P. Parent and J. Jupille, Compared bonding geometries of C_2H_4 and C_3H_6 on K-covered Pt(111) surfaces 287/288 (1993) 460
Castro, G.R., see Schneider 287/288 (1993) 146
Caudano, R., see Conard 287/288 (1993) 382
Cavanagh, R.R., E.J. Heilweil and J.C. Stephenson, Time-resolved probes of surface dynamics 283 (1993) 226
Cavell, R.G., see Karolewski 290 (1993) 80
Ceballos, G., see Schick 287/288 (1993) 960
Cerrina, F., see Capasso 287/288 (1993) 1046
Chabal, Y.J., see Jakob 285 (1993) 251
Chakarov, D.V., P. Sjövall and B. Kasemo, Vibrational spectra of KO_x complexes on graphite 287/288 (1993) 278
Chakraborty, B.R., see Sharma 285 (1993) 237
Chambliss, D.D., see Rousset 287/288 (1993) 941
Chao, Y.-C., see Landemark 287/288 (1993) 529
Charatan, R.M. and R.S. Williams, Influence of triple scattering on impact collision ion scattering spectroscopy at 135° 289 (1993) 163
Chavy, C., see Girard 282 (1993) 400
Chemelli, C., see Abbati 281 (1993) 127
Chen, C.T., see Smith 282 (1993) L359
Chen, C.T., see Idzerda 287/288 (1993) 741
Chen, D., see Gallagher 281 (1993) L335
Chen, L.-W., see Biham 287/288 (1993) 815
Chesters, M.A., see Raval 289 (1993) 227
Chiang, S., see Hallmark 286 (1993) 190
Chiang, S., see Rousset 287/288 (1993) 941
Chiarello, G., see Caputi 289 (1993) L591
Chiorino, A., see Ghiotti 287/288 (1993) 228
Cho, C.H., see Park 283 (1993) 70
Choi, W., C. Kim and H. Kang, Interactions of low energy (10–600 eV) noble gas ions with a graphite surface: surface penetration, trapping and self-sputtering behaviors 281 (1993) 323
Chorkendorff, I., see Rasmussen 287/288 (1993) 79
Chorkendorff, I., P.B. Rasmussen, H. Christoffersen and P.A. Taylor, The stabilization of adsorbed carbon dioxide by formate on Cu(100) 287/288 (1993) 208
Choudhary, K.M., see Mangat 285 (1993) 102
Christman, S.B., see Jakob 285 (1993) 251
Christmann, K., see Neumann 287/288 (1993) 593
Christoffersen, H., see Rasmussen 287/288 (1993) 79
Christoffersen, H., see Chorkendorff 287/288 (1993) 208
Chu, J.C.S., Y. Bu and M.C. Lin, Spectroscopy and reactions of hydrazoic acid on silicon single crystal surfaces. III. HN_3 and DN_3 on Si(111)(7×7) 284 (1993) 281
Chu, J.C.S., see Bu 285 (1993) 243
Chuikov, B.A., V.V. Dvurechenskikh, V.D. Osovskii, Yu.G. Ptushinskii and V.G. Sukretnyi, Adsorption of H_2 and D_2 on W(111) and W(110) surfaces at low temperatures (down to 5 K) 285 (1993) 75
Ciccacci, F., see Finazzi 287/288 (1993) 264
Cini, M., R. Del Sole and L. Reining, Theory of second-harmonic generation at semiconductor surfaces 287/288 (1993) 693

Clemens, H.J., see Troost 286 (1993) 97
Clemens, W., see Rader 287/288 (1993) 736
Colavita, E., see Caputi 282 (1993) 62
Colavita, E., see Caputi 289 (1993) L591
Colbow, K., see Zhang 286 (1993) 327
Cole, R.K., see Capasso 287/288 (1993) 1046
Cole, T., see Erickson 281 (1993) 220
Comelli, G., see Morgante 285 (1993) 227
Comin, F., see Martin-Gago 287/288 (1993) 911
Comsa, G., see Raunau 284 (1993) L375
Comsa, G., see Zeppenfeld 285 (1993) L461
Comsa, G., see Raunau 286 (1993) 203
Comsa, G., see Goerge 289 (1993) 201
Conard, T., L. Philippe, P.A. Thiry, Ph. Lambin and R. Caudano, Electron energy-loss spectroscopy and dynamics of $SrTiO_3(100)$ 287/288 (1993) 382
Conrad, H., see Lamont 287/288 (1993) 169
Corà, F., see Pisani 282 (1993) 185
Cortigiani, B., see Bardi 282 (1993) L365
Cortona, P., see Bellman 282 (1993) 273
Courths, R., see Löbus 287/288 (1993) 568
Courths, R., see Heise 287/288 (1993) 658
Cousty, J., see Watel 281 (1993) L297
Cousty, J., see Thibaudau 281 (1993) L303
Cowley, J.M., see Gajdardziska-Josifovska 284 (1993) 186
Cowley, J.M., see Huang 285 (1993) 42
Cowley, J.M., see Huang 289 (1993) 340
Cox, L.E., see Almeida 287/288 (1993) 141
Craig, B.I., A theoretical examination of the electron localisation within a small hydrogen covered silicon outcrop on Si(001) 285 (1993) L486
Craig, B.I. and P.V. Smith, Erratum to "The structures of small hydrocarbons adsorbed on Si(001) and Si terminated β-SiC(001)" [Surface Science 276 (1992) 174] 285 (1993) 295
Craig, B.I. and P.V. Smith, Monolayer chemisorption of HCl and Cl_2 on the Si(001)2×1 surface 290 (1993) L662
Crampin, S., M. Nekovee, J.B.A.N. van Hoof and J.E. Inglesfield, Subvolume embedding for interfacial electronic structure 287/288 (1993) 732
Creemers, C., see Bertolini 281 (1993) 102
Croci, M., C. Félix, G. Vandoni, W. Harbich and R. Monot, Measurement of macroscopic diffusion of CO on Pt(111) by thermal helium scattering 290 (1993) L667
Crook, S., see Purdie 290 (1993) L680
Crowley, M.F., D. Srivastava and B.J. Garrison, Molecular dynamics investigation of the MBE growth of Si on Si{110} 284 (1993) 91
Crozier, P.A., see Gajdardziska-Josifovska 284 (1993) 186
Cruickshank, B.J., D.D. Sneddon and A.A. Gewirth, In situ observations of oxygen adsorption on a Cu(100) substrate using atomic force microscopy 281 (1993) L308
Cserháti, Cs., H. Bakker and D.L. Beke, Kinetics of surface segregation in alloys 290 (1993) 345
Cvetko, D., see Bellman 281 (1993) L321
Cvetko, D., see Bellman 282 (1993) 273
Cvetko, D., see Morgante 285 (1993) 227

Dabringhaus, H. and M. Haag, Desorption transients in the system KBr on KCl(100) 281 (1993) 133
D'Addato, S., see Newstead 287/288 (1993) 317

Dai, Z.-G., see Su 282 (1993) 357
Daikhin, L., see Urbakh 287/288 (1993) 847
Dake, L.S. and R.J. Lad, Electronic and chemical interactions at aluminum/TiO_2(110) interfaces 289 (1993) 297
Dastoor, H.E., P. Gardner and D.A. King, The coadsorption of ammonia and oxygen on Ni{110}: a RAIRS study 289 (1993) 279
David, R., see Grosche 281 (1993) L341
David, R., see Zeppenfeld 285 (1993) L461
David, R., see Goerge 289 (1993) 201
Davidson, M.R., G.B. Hoflund and R.A. Outlaw, Electron stimulated desorption of oxygen atoms and ions from an oxidized Ag–Zr alloy surface 281 (1993) 111
Davies, P.R., see Afsin 284 (1993) 109
De Castro, S.G.C., see Kleiman 287/288 (1993) 794
De Castro, S.G.C., see Kleiman 287/288 (1993) 798
De Castro, S.G.C., see Landers 287/288 (1993) 802
De Crescenzi, M., see Motta 284 (1993) 257
De Crescenzi, M., see Di Nardo 287/288 (1993) 1087
De Meijere, A., see Hirayama 287/288 (1993) 160
De Renzi, V., M.G. Betti and C. Mariani, Electronic and dielectric properties of Bi grown on GaAs(110) 287/288 (1993) 550
De Segovia, J.L., see Greenwood 287/288 (1993) 386
De Stasio, G., see Capasso 287/288 (1993) 1046
De Vita, A., see Manassidis 285 (1993) L517
Decleva, P., see Ohno 284 (1993) 372
Del Sole, R., see Cini 287/288 (1993) 693
Delgado-Barrio, G., see Hernández 290 (1993) L693
Den Daas, H., O.L.J. Gijzeman and J.W. Geus, Oxidation of ultrathin iron layers on Cu(100). Composition of the oxide films 285 (1993) 15
Den Daas, H., O.L.J. Gijzeman and J.W. Geus, Low energy Auger electron spectroscopy of iron oxide: oxidation of one monolayer of iron on Cu(100) 290 (1993) 26
Denier van der Gon, A.W., see O'Connor 287/288 (1993) 438
DePristo, A.E., see Halstead 286 (1993) 275
DePristo, A.E., see Yang 290 (1993) 195
Desjonquères, M.C., see Vinchon 287/288 (1993) 534
Desjonquères, M.C., see Said 287/288 (1993) 780
Desjonquères, M.C., see Piveteau 287/288 (1993) 946
Dhanak, V.R., see Bellman 282 (1993) 273
Dhanak, V.R., see Morgante 285 (1993) 227
Di Bona, A., see Valeri 289 (1993) L617
Di Nardo, S., L. Lozzi, M. Passacantando, P. Picozzi, S. Santucci and M. De Crescenzi, Extended fine Auger structure investigation of discontinuous copper films deposited on graphite 287/288 (1993) 1087
Díaz, J., see Martin-Gago 287/288 (1993) 911
Diebold, U., J.-M. Pan and T.E. Madey, Ultrathin metal films on TiO_2(110): metal overlayer spreading and surface reactivity 287/288 (1993) 896
Dillon, A.C., M.B. Robinson, S.M. George and D.A. Roberts, Adsorption and decomposition of diethylgermane on porous silicon surfaces 286 (1993) L535
Dippel, R., K.-U. Weiss, K.-M. Schindler, D.P. Woodruff, P. Gardner, V. Fritzsche, A.M. Bradshaw and M.C. Asensio, Multiple site coincidences and their resolution in photoelectron diffraction: PF_3 adsorbed on Ni(111) 287/288 (1993) 465
Dittmar-Wituski, A. and P.J. Møller, Surface spectroscopy from ultrathin α-Sn films on CdTe(110) 287/288 (1993) 577

Doak, R.B., see Hinch 286 (1993) 261
Dobrev, D., see Pavlovska 286 (1993) 176
Doi, S., see Asada 286 (1993) L554
Döll, R., see Starke 287/288 (1993) 432
Döll, R., see Mendez 290 (1993) 45
Domen, K., see Hirose 283 (1993) 244
Domen, K., N. Akamatsu, H. Yamamoto, A. Wada and C. Hirose, Infrared-visible sum frequency generation study of HCOOH on an MgO(001) surface 283 (1993) 468
Domen, K., see Kondoh 287/288 (1993) 74
Doña, J.M. and J. González-Velasco, Erratum to "The dependence of the surface diffusion coefficients of gold atoms on the potential: its influence on reconstruction of metal lattices" [Surface Science 274 (1992) 205] 282 (1993) 202
Donath, M., Recent developments in surface and thin film magnetism probed by spin-polarized electrons 287/288 (1993) 722
Dondi, M.G., see Bellman 282 (1993) 273
Dong, C.-Z., see Madey 287/288 (1993) 826
Dorenbos, G. and D.O. Boerma, The structure of the Ag(110)-c(6×2)O surface determined with LEIS 287/288 (1993) 443
Dorren, B.H.P., see Görts 287/288 (1993) 255
Dower, C.S., see Lucas 286 (1993) 46
Doyen, G., see Sebastian 290 (1993) L703
Dreyfus, R.W., Interpreting laser ablation using cross sections 283 (1993) 177
Du Plessis, J., Sequential surface segregation kinetics of the ternary system Fe–Si–S 287/288 (1993) 857
Dubois, L.H., see Hinch 286 (1993) 261
Dubot, P., E. Alleno, M.-G. Barthés-Labrousse, C. Binns, C. Nicklin, C. Norris and D. Ravot, Electronic properties of low-dimensional Sm films adsorbed on Cr(211) and Cr(110) 282 (1993) 1
Ducarroir, M., see Maline 286 (1993) 82
Dudde, R. and B. Reihl, Electronic structure of alkali-metal monolayers on Cu(111) 287/288 (1993) 614
Dudzik, E., see Newstead 287/288 (1993) 317
Dudzik, E., see Whittle 287/288 (1993) 554
Dumas, P., see Jakob 285 (1993) 251
Dunn, D., see Xu 285 (1993) L479
Duò, L., see Finazzi 287/288 (1993) 264
Dvurechenskikh, V.V., see Chuikov 285 (1993) 75

Eades, J.A., see Ma 289 (1993) 47
Ealet, B. and E. Gillet, Palladium alumina interface: influence of the oxide stoichiometry studied by EELS and XPS 281 (1993) 91
Eberhardt, W., see Rader 287/288 (1993) 736
Ebert, Ph. and K. Urban, Step smoothing and surface vacancy reactions on InP(110) and GaP(110) observed by scanning tunneling microscopy 287/288 (1993) 891
Edamoto, K., see Aiura 283 (1993) 344
Edamoto, K., T. Anazawa, E. Miyazaki, H. Kato and S. Otani, Chemisorption state of atomic oxygen on TiC(100) surface: angle-resolved photoemission study 287/288 (1993) 667
Egawa, C., Y. Tezuka, S. Oki and Y. Murata, Structures of ultra-thin Fe overlayers on a Rh(001) surface 283 (1993) 338
Egdell, R.G., see Potter 287/288 (1993) 649
Egdell, R.G., see Taverner 287/288 (1993) 653
Eguiluz, A.G., see Heinrichsmeier 285 (1993) 129
Ehrhardt, J.J., see Alnot 287/288 (1993) 325
Einstein, T.L., see Eisner 286 (1993) L559

Eisner, D.R. and T.L. Einstein, Simple formula for Miller indices of periodically kinked and stepped fcc surfaces 286 (1993) L559
Eklund, E.A., E.J. Snyder and R.S. Williams, Correlation from randomness: quantitative analysis of ion-etched graphite surfaces using the scanning tunneling microscope 285 (1993) 157
Elbel, N., see Hammer 287/288 (1993) 84
Elings, V.B., see Zhong 290 (1993) L688
Engel, T., see Yang 289 (1993) 267
Engel, T., see Johnson 290 (1993) 213
Engel, W., see Rausenberger 287/288 (1993) 235
Erbudak, M., see Aebi 285 (1993) 275
Ercolessi, F., see Tomagnini 287/288 (1993) 1041
Erickson, J.W., W.M. Theis, T. Cole, A.K. Green and V. Rehn, Erratum to "A photoemission study of coherently strained In_xGa_{1-x}/InP(100)" [Surface Science 274 (1992) 363] 281 (1993) 220
Erley, W., see Land 289 (1993) 237
Erskine, J.L., see Herman 290 (1993) L643
Ertl, G., see Bao 284 (1993) 14
Ertl, G., Self-organization in reactions at surfaces 287/288 (1993) 1
Esposto, F.J., C.-S. Zhang, P.R. Norton and R.S. Timsit, Segregation studies of an Al–Li alloy 290 (1993) 93
Esposto, F.J., see Zhang 290 (1993) 103
Estrup, P.J., see Prybyla 290 (1993) 413
Eteläniemi, V., E.G. Michel and G. Materlik, RbBr/Si(111) interface studied by the X-ray standing wave method 287/288 (1993) 288
Ettema, A.R.H.F., C. Haas, P. Moriarty and G. Hughes, Wave function imaging of the PbS(001) surface with scanning tunneling microscopy 287/288 (1993) 1106
Eugène, J., see Senhaji 287/288 (1993) 371
Evans, J.W. and M.C. Bartelt, Irreversible island formation during deposition: separation distributions and diffraction profiles 284 (1993) L437
Evans, J.W., see Flynn-Sanders 289 (1993) 75
Evers, P., see Albrecht 283 (1993) 419
Ewig, C.S., see Liu 281 (1993) L353

Fadley, C.S., see Tran 281 (1993) 270
Fadley, C.S., see Saiki 282 (1993) 33
Fadley, C.S., see Herman 284 (1993) 23
Fairbrother, D.H., X.D. Peng, R. Viswanathan, P.C. Stair, M. Trenary and J. Fan, Carbon–carbon coupling of methyl groups on Pt(111) 285 (1993) L455
Falkenberg, G., see Seehofer 290 (1993) 15
Fan, J. and M. Trenary, The influence of coadsorbates on the overlayer structure of PF_3 on Pt(111) 282 (1993) 76
Fan, J., see Fairbrother 285 (1993) L455
Fang, K., H.-N. Yang and G.-C. Wang, Modification of surface structures and roughening phase transition in Pb(110) by impurities 284 (1993) L399
Fann, W.S., R. Storz, H.W.K. Tom and J. Bokor, Direct measurement of nonequilibrium electron-energy distributions in sub-picosecond laser-heated gold films 283 (1993) 221
Feibelman, P.J., Perturbation of surface plasmon dispersion by "extra" electrons near a surface 282 (1993) 129
Feidenhans'l, R., see Le Lay 287/288 (1993) 539

Feliu, J.M., R. Gómez, M.J. Llorca and A. Aldaz, Electrochemical behavior of irreversibly adsorbed selenium dosed from solution on Pt(*h, k, l*) single crystal electrodes in sulphuric and perchloric acid media 289 (1993) 152
Félix, C., see Croci 290 (1993) L667
Fernández, A., see Soriano 290 (1993) 427
Ferrando, R. and E. Scalas, Self-diffusion in a 2D lattice gas with lateral interactions 281 (1993) 178
Ferrando, R., R. Spadacini and G.E. Tommei, The diffusion coefficient beyond TST and jump theory 287/288 (1993) 886
Ferrando, R. and E. Scalas, Incoherent scattering width in 2D systems with lateral interactions 287/288 (1993) 907
Ferrante, J., see Rodríguez 289 (1993) 100
Ferrante, J., see Bozzolo 289 (1993) 169
Ferrer, S., Phase information in the crystal truncation rods 286 (1993) L564
Ferrer, S., see Martin-Gago 287/288 (1993) 911
Feulner, P., see Allers 286 (1993) 297
Fichthorn, K.A. and W.H. Weinberg, An analysis of adsorbate mobility from the kinetics of two-dimensional domain growth: precursor-mediated surface diffusion 286 (1993) 139
Finazzi, M., L. Duò, G. Bacchin, F. Ciccacci and E. Puppin, Ultraviolet inverse photoemission study of the oxidation of Fe, Co and Ni 287/288 (1993) 264
Fink, R., see Krausch 285 (1993) 81
Fischer, D.A., see Purdie 290 (1993) L680
Fleszar, A., see Heinrichsmeier 285 (1993) 129
Flinn, B.J., see Zhang 290 (1993) 103
Flipse, C.F.J., see O'Mahony 287/288 (1993) 713
Flodström, S.A., see Grehk 284 (1993) L384
Flynn-Sanders, D.K., J.W. Evans and P.A. Thiel, Homoepitaxial growth on Pd(100) 289 (1993) 75
Fondén, T., see Zwartkruis 290 (1993) 134
Fowler, D.E., see Rousset 287/288 (1993) 941
Frederick, B.G., see Rhodin 287/288 (1993) 638
Freeman, A.J., see Spiess 289 (1993) L631
Frenken, J.W.M., H.M. van Pinxteren and L. Kuipers, New views on surface melting obtained with STM and ion scattering 283 (1993) 283
Frenken, J.W.M., see O'Connor 287/288 (1993) 438
Frenken, J.W.M., see Vrijmoeth 290 (1993) 255
Friedman, D.J., see Tran 281 (1993) 270
Friedman, D.J., see Saiki 282 (1993) 33
Friedman, D.J., see Herman 284 (1993) 23
Friend, C.M., see Xu 289 (1993) L599
Fritsche, L., see Weimert 289 (1993) 397
Fritzsche, V., see Dippel 287/288 (1993) 465
Fritzsche, V., J.B. Pendry, U. Löffler, H. Wedler, M.A. Mendez and K. Heinz, Surface dipole moments from LEED investigations 289 (1993) 389
Fronzoni, G., see Ohno 284 (1993) 372
Frotscher, U., see Rossow 287/288 (1993) 718
Fuchs, A.H., see Boutin 287/288 (1993) 866
Fuggle, J.C., see Soriano 281 (1993) 120
Fuggle, J.C., see Soriano 290 (1993) 427
Fujisawa, M., see Nishijima 283 (1993) 121
Fujishima, A., see Liu 284 (1993) L411
Fujiwara, T., see Itoh 282 (1993) 122
Fukuhara, N., see Kittaka 282 (1993) 255

Fukui, K.-I., T. Aruga and Y. Iwasawa, Chemisorption of CO and H_2 on clean and oxygen-modified Mo(112) 281 (1993) 241
Fukui, M., see Okuno 290 (1993) 421
Fukutani, H., see Aiura 283 (1993) 344
Fukutani, K., Promotion of epitaxial growth of Ge by Ag and Pb deposited on a clean Ge(111) surface 281 (1993) 285
Fukutani, K., A. Peremans, K. Mase and Y. Murata, Photo-stimulated desorption of NO from a Pt(001) surface 283 (1993) 158
Fukutani, K., see Peremans 283 (1993) 189
Fukutani, K., M. Tsunoda, Y. Murata, H. Yamashita, K. Komaki and K. Kobayashi, High-resolution depth analysis of hydrogen by a resonance nuclear reaction: a-Si/H/Si(001) 283 (1993) 447
Fuoss, P.H., see Lucas 286 (1993) 46

Gaber, H., see Busmann 289 (1993) 381
Gaggiotti, G., see Motta 284 (1993) 257
Gaines, J.M. and C.A. Ponzoni, Beating in RHEED oscillations observed during MEE growth of ZnSe 290 (1993) 172
Gajdardziska-Josifovska, M., P.A. Crozier, M.R. McCartney and J.M. Cowley, Ca segregation and step modifications on cleaved and annealed MgO(100) surfaces 284 (1993) 186
Gajdardziska-Josifovska, M., M.R. McCartney and D.J. Smith, Reflection electron microscopy studies of GaP(110) surfaces in UHV-TEM 287/288 (1993) 1062
Galán, L., see Soriano 281 (1993) 120
Gallagher, M.J., D. Chen, B.P. Jacobsen, D. Sarid, L.D. Lamb, F.A. Tinker, J. Jiao, D.R. Huffman, S. Seraphin and D. Zhou, Characterization of carbon nanotubes by scanning probe microscopy 281 (1993) L335
Gardner, P., see Tüshaus 286 (1993) 212
Gardner, P., R. Martin, M. Tüshaus, J. Shamir and A.M. Bradshaw, The structure-sensitive adsorption of N_2 on the (1×1) and (5×1) surfaces of Ir{100} 287/288 (1993) 135
Gardner, P., see Dippel 287/288 (1993) 465
Gardner, P., see Dastoor 289 (1993) 279
Garfunkel, E., see Zhou 284 (1993) 67
Garrison, B.J., see Crowley 284 (1993) 91
Gauthier, Y., see Bugnard 281 (1993) 62
Gauyacq, J.P., see Borisov 284 (1993) 337
George, S.M., see Dillon 286 (1993) L535
Geus, J.W., see den Daas 285 (1993) 15
Geus, J.W., see den Daas 290 (1993) 26
Geus, J.W., see van Kooten 290 (1993) 302
Gewinner, G., see Rouyer 287/288 (1993) 935
Gewirth, A.A., see Cruickshank 281 (1993) L308
Ghiotti, G., A. Chiorino and F. Boccuzzi, Surface chemistry and electronic effects of H_2 (D_2) on two different microcrystalline ZnO powders 287/288 (1993) 228
Gibbs, D., see Abernathy 283 (1993) 260
Gibbs, D., see Sandy 287/288 (1993) 321
Gibbs, D., see Grübel 287/288 (1993) 842
Gielbert, A., see van Tol 287/288 (1993) 201
Gijzeman, O.L.J., see den Daas 285 (1993) 15
Gijzeman, O.L.J., see den Daas 290 (1993) 26
Gijzeman, O.L.J., see van Kooten 290 (1993) 302
Gillan, M.J., see Manassidis 285 (1993) L517
Gillet, E., see Ealet 281 (1993) 91

Girard, C., C. Joachim, C. Chavy and P. Sautet, The electric field under a STM tip apex: implications for adsorbate manipulation 282 (1993) 400
Girardet, C. and P.N.M. Hoang, Dynamics of a frustrated rare gas monolayer adsorbed on a corrugated substrate: resonance and hybridization of the dispersion curves of Ar on MgO(100) 282 (1993) 288
Girlanda, R., see Piparo 287/288 (1993) 699
Gitmans, F., see Radnik 287/288 (1993) 330
Gland, J.L., see Huang 290 (1993) L673
Glines, A.M. and A.B. Anton, Effects of the hydrogen-induced (1×2) surface reconstruction on the kinetics of ethylene hydrogenation on Ni(110) 286 (1993) 122
Glück, C., see Mendez 290 (1993) 45
Gnaser, H., see Bock 282 (1993) 333
Göbel, H., see Zimmermann 287/288 (1993) 876
Goerge, J., P. Zeppenfeld, R. David, M. Büchel and G. Comsa, Structure of the hydrogen covered Cu(110) surface studied with thermal energy helium scattering 289 (1993) 201
Goldberg, E.C., see Bolcatto 289 (1993) 187
Goldmann, A., see Matzdorf 286 (1993) 56
Golichowski, A., see Harder 287/288 (1993) 16
Gomer, R., see Zhao 286 (1993) 290
Gomer, R., see Song 290 (1993) 1
Gómez, R., see Feliu 289 (1993) 152
Goniakowski, J., S. Bouette-Russo and C. Noguera, Acido-basic properties of simple oxide surfaces. III. Systematics of H^+ and OH^- adsorption 284 (1993) 315
Goniakowski, J., see Noguera 287/288 (1993) 188
González-Elipe, A.R., see Soriano 290 (1993) 427
González-Velasco, J., see Doña 282 (1993) 202
Good, B., see Bozzolo 289 (1993) 169
Goodman, D.W., see Xu 282 (1993) 323
Goodman, D.W., see Xu 284 (1993) 103
Gordon, D.E.A. and R.M. Lambert, CO_2 adsorption on oxygen-modified Ni(111) 287/288 (1993) 114
Görling, A., L. Ackermann, J. Lauber, P. Knappe and N. Rösch, On the coadsorption of CO and alkali atoms at transition metal surfaces: a LCGTO-LDF cluster study 286 (1993) 26
Gorse, D., see Serruys 282 (1993) 279
Görts, P.C., B.H.P. Dorren and F.H.P.M. Habraken, Oxidation of the Co(10$\bar{1}$0) surface 287/288 (1993) 255
Goto, Y., see Hirose 283 (1993) 244
Gotoh, T. and S. Takagi, Angular distribution of ions desorbed from clean and H_2O-exposed MgO(001) by electron stimulation 287/288 (1993) 31
Gotoh, T., see Takagi 287/288 (1993) 361
Gotoh, Y. and E. Yanokura, Epitaxial growth of MoO_2 on a Mo(110) surface observed by RHEED 287/288 (1993) 979
Grazhulis, V.A., see Bolotin 287/288 (1993) 630
Green, A.K., see Erickson 281 (1993) 220
Greenler, R.G., see Brandt 286 (1993) 15
Greenwood, C.L., E.M. Williams, G. Thornton, S.L. Bennett, E. Román, J.L. de Segovia and M.C. Torquemada, An ESD and ESDIAD investigation of $TiO_2(110)$–SO_2 287/288 (1993) 386
Greenwood, C.L., see Bennett 290 (1993) 267
Grehk, T.M., C.U.S. Larsson, N.P. Prince and S.A. Flodström, Adsorption of lithium on the Si(111)7×7 surface studied with high resolution core-level spectroscopy 284 (1993) L384
Grey, F., see Le Lay 287/288 (1993) 539

Griffiths, K., W.N. Lennerd, I.V. Mitchell, P.R. Norton, G. Pirug and H.P. Bonzel, Saturated ethylene coverage on Pt(111): a comparison of nuclear reaction analysis and X-ray photoemission data 284 (1993) L389
Gritskov, P.V., see Mikheeva 287/288 (1993) 662
Grosche, U., H. Hamadeh, O. Knauff, R. David and H.P. Bonzel, Orientation of adsorbed ethylene oxide on Ni(110) by X-ray photoelectron diffraction 281 (1993) L341
Gross, A. and W. Brenig, Vibrational excitation of NO in NO/Ag scattering revisited 289 (1993) 335
Gross, G. and K.H. Rieder, Revisiting the iterative procedure for atomic beam diffraction analyses: improvements, caveats and first application to a 2D adsorption structure 289 (1993) 180
Grübel, G., see Abernathy 283 (1993) 260
Grübel, G., see Sandy 287/288 (1993) 321
Grübel, G., D. Gibbs, D.M. Zehner, D.L. Abernathy, A.R. Sandy and S.G.J. Mochrie, Phase behavior of Au and Pt surfaces 287/288 (1993) 842
Gruen, D.M., see Whitten 282 (1993) 97
Grütter, P., see Lüthi 285 (1993) L498
Gu, Z., see Yu 286 (1993) 116
Guan, J., see Madey 287/288 (1993) 826
Gudat, W., see Rader 287/288 (1993) 736
Guest, R.J., see Nilsson 287/288 (1993) 758
Guillot, C., see Barrett 286 (1993) 150
Gumhalter, B., see Aničić 287/288 (1993) 39
Gumhalter, B., see Lovrić 287/288 (1993) 789
Gundersen, K., B. Hammer, K.W. Jacobsen, J.K. Nørskov, J.S. Lin and V. Milman, Chemisorption and vibration of hydrogen on Cu(111) 285 (1993) 27
Günther, S., see Kopatzki 284 (1993) 154
Güntherodt, H.-J., see Lüthi 285 (1993) L498
Güntherodt, H.-J., see Tarrach 285 (1993) 1
Guo, H., see Huang 286 (1993) 182
Guo, Xiexian, see Wu 285 (1993) L522
Guo, Z.Y., see Capasso 287/288 (1993) 1046
Gustafsson, T., see Zhou 284 (1993) 67
Guthmann, C., see Balibar 283 (1993) 290
Gutierrez, C.J., see Idzerda 287/288 (1993) 741
Guyot, H., Study of the electronic structure of Ba(Pb, Bi)$O_{3-\delta}$ single crystals 287/288 (1993) 633

Haag, M., see Dabringhaus 281 (1993) 133
Haas, C., see Ettema 287/288 (1993) 1106
Habraken, F.H.P.M., see Leibbrandt 287/288 (1993) 245
Habraken, F.H.P.M., see Leibbrandt 287/288 (1993) 250
Habraken, F.H.P.M., see Görts 287/288 (1993) 255
Haefke, H., see Lüthi 285 (1993) L498
Hagino, M., see Wada 285 (1993) 188
Haight, R. and M. Baeumler, Ultrafast electron dynamics at the Ge(111) surface investigated with subpicosecond laser photoemission 287/288 (1993) 482
Halicioglu, T., Carbon atoms on the (2×1) reconstructed Si(100) surface 285 (1993) 259
Halilov, S., see Löbus 287/288 (1993) 568
Hallmark, V.M. and S. Chiang, Imaging structural details in closely related molecular adsorbate systems 286 (1993) 190
Halstead, D.M. and A.E. DePristo, Thin film growth and the scattering of atoms from surface island defects 286 (1993) 275
Hamadeh, H., see Grosche 281 (1993) L341

Hamawi, A. and L. Walldén, Quantum size effect for Na films on Si(100) 285 (1993) 93
Hammer, B., see Gundersen 285 (1993) 27
Hammer, L., W. Nichtl-Pecher, N. Elbel, W. Stammler, K. Heinz and K. Müller, Phase diagram for hydrogen adsorption on Rh(311) 287/288 (1993) 84
Hamza, A.V., see Schildbach 282 (1993) 306
Hanada, T., see Hikita 287/288 (1993) 377
Haneman, D., see Li 281 (1993) L315
Haneman, D., see Li 289 (1993) L609
Hanf, M.C., see Rouyer 287/288 (1993) 935
Hansali, G., see Le Bossé 282 (1993) 389
Hansen, L.B., see Nørskov 283 (1993) 277
Hansen, L.B., P. Stoltze, K.W. Jacobsen and J.K. Nørskov, Activation free energy and entropy for the normal and exchange selfdiffusion processes on Cu(100) 289 (1993) 68
Hansson, T. and L. Holmlid, Large hysteresis effect in surface ionization of Cs due to bulk diffusion 281 (1993) 309
Hansson, T. and L. Holmlid, Velocity distribution of Cs atoms emitted from a hot graphite-covered Ir surface after diffusion through the Ir bulk 282 (1993) L370
Hara, M., see Kondoh 287/288 (1993) 74
Harada, Y., see Masuda 283 (1993) 78
Harbich, W., see Croci 290 (1993) L667
Harder, R., see Rechtien 282 (1993) 137
Harder, R., K. Tellioglu, A. Nesbitt, G. Herrmann, A. Golichowski and K.J. Snowdon, Role of projectile-motion-induced electronic transitions in the dissociation of fast H_2 at a Cu(111) surface 287/288 (1993) 16
Harder, R., A. Nesbitt, J.-H. Rechtien, W. Mix, C. Röthig, M. Kato and K.J. Snowdon, Evidence for hot electron induced angular straggling of Ne beams scattered from Cu(111) 289 (1993) 214
Harris, J. and A.C. Luntz, On tunneling-dissociation at surfaces 287/288 (1993) 56
Harrison, I., see Ukraintsev 286 (1993) L571
Hasegawa, M., see Ninomiya 287/288 (1993) 1051
Hasegawa, S. and S. Ino, Surface structures and conductance at initial stages in epitaxy of metals on a Si(111) surface 283 (1993) 438
Hashimoto, T., J. Murakami and I. Kusunoki, Low-energy Ne^+ bombardment on O-adsorbed Be surfaces 287/288 (1993) 46
Hashizume, H., see Niwa 282 (1993) 342
Hasselbrink, E., see Hirayama 287/288 (1993) 160
Hattori, K., see Nakai 283 (1993) 169
Hausmann, R., see Müller 284 (1993) 129
Hayami, W., see Souda 283 (1993) 36
Hayami, W., see Souda 285 (1993) 265
Hayami, W., see Souda 290 (1993) 245
He, H., J. Nakamura and K. Tanaka, Formation of CH_x species on a Ni(100) surface by the hydrogenation of carbidic carbon 283 (1993) 117
He, J.-W., see Xu 284 (1993) 103
Heilweil, E.J., see Cavanagh 283 (1993) 226
Heinrich, B., see Zhang 286 (1993) 327
Heinrichsmeier, M., A. Fleszar and A.G. Eguiluz, LDA calculation of the surface states on the (001), (110), and (111) surfaces of aluminum 285 (1993) 129
Heinz, K., see Hammer 287/288 (1993) 84
Heinz, K., see Starke 287/288 (1993) 432
Heinz, K., see Fritzsche 289 (1993) 389
Heinz, K., see Mendez 290 (1993) 45

Heinz, T.F., see Budde 283 (1993) 143
Heinzmann, U., see Hilgers 287/288 (1993) 414
Heise, R. and R. Courths, Examination of the electronic structure of TiO_2(110) using photoelectron diffraction 287/288 (1993) 658
Held, G., see Van Hove 287/288 (1993) 428
Hellsing, B., Direct mechanism for photoinduced desorption and dissociation of O_2 on Pt(111) 282 (1993) 216
Hennig, D., S. Wilke, R. Löber and M. Methfessel, The adsorption of hydrogen on Pd(100) and Rh(100) surfaces: a comparative theoretical study 287/288 (1993) 89
Hennig, D., see Methfessel 287/288 (1993) 785
Henrich, V.E., Photoemission difference spectroscopy of semiconductors and insulators: assumptions and limitations 284 (1993) 200
Henzler, M., see Horn-von Hoegen 284 (1993) 53
Herman, G.S., see Tran 281 (1993) 270
Herman, G.S., E.L. Bullock, M. Yamada, A.P. Kaduwela, D.J. Friedman, S. Thevuthasan, Y.J. Kim, T.T. Tran, C.S. Fadley, Th. Lindner, D.E. Ricken, A.W. Robinson and A.M. Bradshaw, A scanned-angle and scanned-energy photoelectron diffraction study of $(\sqrt{3} \times \sqrt{3})$R30° Ag on Si(111) 284 (1993) 23
Herman, G.S., J.C. Woicik, A.B. Andrews and J.L. Erskine, High-resolution photoelectron spectroscopy study of $(\sqrt{3} \times \sqrt{3})$R30°-Ag on Si(111) 290 (1993) L643
Hernández, M., S. Miret-Artés, P. Villarreal and G. Delgado-Barrio, Selective adsorption resonances at rainbow conditions in the scattering of atoms by stepped surfaces: application to the ^{4}He/Cu(117) system 290 (1993) L693
Hernnäs, B., see Nilsson 287/288 (1993) 758
Herrmann, G., see Rechtien 282 (1993) 137
Herrmann, G., see Harder 287/288 (1993) 16
Hertel, I.V., see Busmann 289 (1993) 381
Heskett, D., see Shi 290 (1993) 69
Heuell, P., see Kulakov 287/288 (1993) 241
Hibma, T., see Peacor 287/288 (1993) 403
Hibma, T., see Bootsma 287/288 (1993) 921
Hibma, T., see Wemmenhove 287/288 (1993) 925
Hikita, T., T. Hanada, M. Kudo and M. Kawai, Structure and electronic state of the TiO_2 and SrO terminated $SrTiO_3$(100) surfaces 287/288 (1993) 377
Hilgers, G., M. Potthoff, N. Müller and U. Heinzmann, Structural investigations on Xe/Pd(111) with spin-polarized LEED 287/288 (1993) 414
Hill, E.K., see Bugnard 281 (1993) 62
Hillel, R., see Maline 286 (1993) 82
Hinarejos, J.J., see Alvarez 287/288 (1993) 490
Hinch, B.J., R.B. Doak and L.H. Dubois, Surface topography changes induced by chemical vapor deposition of aluminum on Al(111) 286 (1993) 261
Hingerl, K., D.E. Aspnes and I. Kamiya, Comparison of reflectance difference spectroscopy and surface photoabsorption used for the investigation of anisotropic surfaces 287/288 (1993) 686
Hirai, K., see Kishi 290 (1993) 309
Hirai, M., see Kawamoto 287/288 (1993) 151
Hirai, Y., Total-energy distribution of field-emitted electrons from a W(100) surface 287/288 (1993) 605
Hirano, M., see Shinjo 283 (1993) 473
Hirayama, H., Low energy H_3^+ molecular ion scattering from the Si(100) surface 287/288 (1993) 12
Hirayama, H., A. de Meijere and E. Hasselbrink, The influence of lateral interactions on the angular distribution in photodesorption 287/288 (1993) 160
Hirayama, T., see Weibel 283 (1993) 204

Hirose, C., Y. Goto, N. Akamatsu, J. Kondo and K. Domen, Measurement of vibrational energy relaxation of a surface hydroxyl group by ultrashort tunable infrared pulses — 283 (1993) 244
Hirose, C., see Domen — 283 (1993) 468
Hirose, T., see Obara — 283 (1993) 387
Hiss, R., see Busmann — 289 (1993) 381
Hitchcock, A.P., see Aebi — 285 (1993) 275
Ho, K.M., see Rodach — 286 (1993) 66
Hoang, P.N.M., see Girardet — 282 (1993) 288
Hock, K.M. and R.E. Palmer, Temperature dependent behaviour in the adsorption of submonolayer potassium on graphite — 284 (1993) 349
Hock, K.M., see Šiller — 287/288 (1993) 165
Hock, K.M., see Barnard — 287/288 (1993) 178
Höfer, M., H. Stolz and H.-W. Wassmuth, Coadsorption of SO_2 and Cs on Ag(100) — 287/288 (1993) 130
Höfer, M., see Stolz — 287/288 (1993) 564
Hofer, W., see Weigand — 287/288 (1993) 350
Hofer, W., see Stadler — 287/288 (1993) 366
Hoffmann, R., see Ward — 289 (1993) 85
Hoffschulz, H., see Schick — 287/288 (1993) 960
Hoflund, G.B., see Davidson — 281 (1993) 111
Hofmann, P., see Knözinger — 290 (1993) 388
Hoinkes, H., see Poehlmann — 287/288 (1993) 269
Hollamby, P.C., see Taverner — 287/288 (1993) 653
Holloway, S., see Smith — 281 (1993) 296
Holmblad, P.M., see Rasmussen — 287/288 (1993) 79
Holmlid, L., see Hansson — 281 (1993) 309
Holmlid, L., see Hansson — 282 (1993) L370
Hongo, S., see Urano — 287/288 (1993) 294
Hongo, S., S. Saito, T. Urano and T. Kanaji, Singlet–triplet conversion efficiency of metastable He atoms dependent upon structures of adsorbed alkali metals on Si(100)2×1 — 287/288 (1993) 588
Hoogers, G. and D.A. King, Adsorbate-induced step-doubling reconstruction of a vicinal metal surface: oxygen on Rh{332} — 286 (1993) 306
Horn-von Hoegen, M., M. Pook, A. Al Falou, B.H. Müller and M. Henzler, The interplay of surface morphology and strain relief in surfactant mediated growth of Ge on Si(111) — 284 (1993) 53
Hu, P., A. Wander, L. Morales de la Garza, M.P. Bessent and D.A. King, An adsorbate-stabilised vacancy structure for Cu on W{100}: a surface alloy — 286 (1993) L542
Huan, A.C.H., see Lin — 285 (1993) 31
Huang, C., see Ludviksson — 284 (1993) 328
Huang, D.H., see Uchida — 287/288 (1993) 1056
Huang, K.G., see Abernathy — 283 (1993) 260
Huang, K.G., see Sandy — 287/288 (1993) 321
Huang, S.X., T.S. Rufael and J.L. Gland, Diimide formation on the Ni(100) surface — 290 (1993) L673
Huang, Y. and J.M. Cowley, A study of the $Cu_3Au(110)$ surface structure by RHEED — 285 (1993) 42
Huang, Y. and J.M. Cowley, Structure of the sulfur-adsorbed $Cu_3Au(110)$ surface — 289 (1993) 340
Huang, Z.-H. and H. Guo, A novel method for simulating atoms and molecules interacting with ionic surfaces — 286 (1993) 182
Hudson, L., see Xu — 289 (1993) L622
Huffman, D.R., see Gallagher — 281 (1993) L335
Hughes, G., see Ettema — 287/288 (1993) 1106
Hughes, H.P., see Starnberg — 287/288 (1993) 627

Hughes, M.R., see Brandt	286	(1993)	15
Hulpke, E. and J. Lüdecke, The giant surface phonon anomaly on hydrogen saturated W(110) and Mo(110)	287/288	(1993)	837
Hurych, Z., see Mangat	285	(1993)	102
Hutt, D.A. and D.W. Bassett, Growth of Ir overlayers on a Mo(110) surface	287/288	(1993)	1000
Ibach, H., see Schmidt	284	(1993)	121
Ibach, H., see Land	289	(1993)	237
Ichinokawa, T., see Itoh	284	(1993)	236
Ichinokawa, T., see Nagashima	287/288	(1993)	609
Ide, T., A. Yamashita and T. Mizutani, STM observation of growth interruption effect of MBE growth	287/288	(1993)	1013
Idzerda, Y.U. and G.A. Prinz, Auger intensity mapping of monolayers of Ni/Cu(001)	284	(1993)	L394
Idzerda, Y.U., L.H. Tjeng, H.-J. Lin, C.J. Gutierrez, G. Meigs and C.T. Chen, Magnetic structure of Fe/Cr/Fe trilayers	287/288	(1993)	741
Igari, Y., see Sugiyama	283	(1993)	64
Ignatiev, A., see Mesarwi	282	(1993)	371
Iizuka, T., see Nagao	287/288	(1993)	391
Iizuka, Y., see Nagao	290	(1993)	436
Ikeda, K., K. Takamuku, R. Itti and N. Koshizuka, Atomic resolution STM observation of the Bi–O surface of yttrium substituted $Bi_2Sr_2CaCu_2O_y$ single crystals	290	(1993)	207
Imaduddin, S. and R.J. Lad, Aluminum deposition on NiO(100): growth, structure and composition of the interface	290	(1993)	35
Imai, F., see Kuramochi	287/288	(1993)	217
Inglesfield, J.E., see Crampin	287/288	(1993)	732
Inniss, D., see Zhong	290	(1993)	L688
Ino, S., T. Yamanaka and S. Ito, Epitaxial growth of metals on Si and Ge investigated by RHEED-TRAXS and UHV-SEM	283	(1993)	319
Ino, S., see Hasegawa	283	(1993)	438
Inokuchi, H., see Liu	284	(1993)	L411
Inoue, M., see Sasaki	283	(1993)	327
Inukai, J., see Nakamura	283	(1993)	248
Ionov, A.M., see Bolotin	287/288	(1993)	630
Ishida, H., see Shi	290	(1993)	69
Ishii, A. and Y. Murata, Theory of adsorbate-sensitive positronium formation and its application to ion desorption	283	(1993)	462
Ishii, A. and T. Aisaka, Dynamical calculation of an ARUPS spectrum for a Si(100)(2×1) surface	287/288	(1993)	299
Ishii, A., Theory of position sensitivity of positronium formation at surfaces and its application to determine adsorbate positions	287/288	(1993)	811
Ishizawa, Y., see Souda	283	(1993)	36
Ishizawa, Y., see Souda	285	(1993)	265
Ishizawa, Y., see Souda	290	(1993)	245
Isshiki, N., see Tsukada	287/288	(1993)	1004
Ito, K., see Naoi	283	(1993)	457
Ito, M., see Nakamura	283	(1993)	248
Ito, S., see Kunimori	283	(1993)	58
Ito, S., see Ino	283	(1993)	319
Itoh, H., S. Narui, H. Tanabe and T. Ichinokawa, Nucleation and surface reconstruction of Pd on Si(100) observed by scanning tunneling microscopy	284	(1993)	236
Itoh, H., see Nagashima	287/288	(1993)	609

Itoh, N., see Nakai 283 (1993) 169
Itoh, S. and T. Fujiwara, Surface electronic structures of refractory-metal disilicides 282 (1993) 122
Itti, R., see Ikeda 290 (1993) 207
Iwade, T., see Kunimori 283 (1993) 58
Iwami, M., see Kawamoto 287/288 (1993) 151
Iwasawa, Y., see Fukui 281 (1993) 241
Iwasawa, Y., see Onishi 283 (1993) 213

Jacob, K.-H., see Knözinger 290 (1993) 388
Jacobi, K., see Aristov 281 (1993) 74
Jacobi, K. and U. Myler, Chemisorption of H, H_2O and C_2H_4 on Si(113): implications for the structure 284 (1993) 223
Jacobs, K., see Krausch 285 (1993) 81
Jacobsen, B.P., see Gallagher 281 (1993) L335
Jacobsen, K.W., see Nørskov 283 (1993) 277
Jacobsen, K.W., see Gundersen 285 (1993) 27
Jacobsen, K.W., see Hansen 289 (1993) 68
Jaeger, N.I., see Tonscheidt 281 (1993) 51
Jaeger, N.I., see Lamber 289 (1993) 247
Jakob, P., Y.J. Chabal, K. Raghavachari, P. Dumas and S.B. Christman, Imperfections on the chemically prepared, ideally H-terminated Si(111)-(1×1) surfaces 285 (1993) 251
Jänsch, H.J., see Ludviksson 284 (1993) 328
Jansen, A.P.J., see van de Kerkhof 284 (1993) 361
Jansen, A.P.J., see Biemolt 287/288 (1993) 183
Jena, P., see Antonelli 289 (1993) L614
Jensen, M.B., U. Myler and P.A. Thiel, Local and collective structure of formate on Pt(111) 290 (1993) L655
Jentz, D., see Van Hove 287/288 (1993) 428
Ji, M., see Zhuang 287/288 (1993) 260
Jiao, J., see Gallagher 281 (1993) L335
Jiménez, C., see Soriano 281 (1993) 120
Joachim, C., see Girard 282 (1993) 400
Johansson, L.S.O. and B. Reihl, Alkali metals on Si(100)2×1: comparative study of the surface electronic structures for Li, Na and K adsorption 287/288 (1993) 524
Johnson, K.E., P.K. Wu, M. Sander and T. Engel, The mesoscopic and microscopic structural consequences from decomposition and desorption of ultrathin oxide layers on Si(100) studied by scanning tunneling microscopy 290 (1993) 213
Johnson, R.L., see Le Lay 287/288 (1993) 539
Johnson, R.L., see Seehofer 290 (1993) 15
Jones, P.L., see Whitten 282 (1993) 97
Jones, T.S., see Mayne 284 (1993) 247
Jones, T.S., see Schweitzer 287/288 (1993) 545
José-Yacamán, M., see Miki-Yoshida 284 (1993) L444
Joyce, B.A., see Ohtani 284 (1993) 305
Jung, T.M., R. Kaplan and S.M. Prokes, Ga on Si(112): growth and energetics of thermal desorption 289 (1993) L577
Jupille, J., see Cassuto 287/288 (1993) 460

Kadowaki, Y., K. Aika, H. Kondoh and H. Nozoye, Surface structure of $MoS_2(001)$ determined by coaxial impact-collision ion scattering spectroscopy (CACISS) 287/288 (1993) 396
Kaduwela, A.P., see Tran 281 (1993) 270
Kaduwela, A.P., see Saiki 282 (1993) 33

Kaduwela, A.P., see Herman	284 (1993)	23
Kageshima, H., see Tsukada	287/288 (1993)	1004
Kalamarides, A., see Budde	283 (1993)	143
Kalki, K., see Schick	287/288 (1993)	960
Kalki, K., see Schmidt	287/288 (1993)	983
Kamiya, I., see Hingerl	287/288 (1993)	686
Kanaji, T., see Urano	287/288 (1993)	294
Kanaji, T., see Hongo	287/288 (1993)	588
Kanasaki, J., see Nakai	283 (1993)	169
Kang, H., see Choi	281 (1993)	323
Kang, H., see Park	283 (1993)	73
Kaplan, R., see Jung	289 (1993)	L577
Kara, A., see Smith	281 (1993)	296
Karabashev, S.G., see Bolotin	287/288 (1993)	630
Karahashi, K., see Matsuo	283 (1993)	52
Karavanov, A.N., see Batirev	289 (1993)	357
Karlsson, C.J., see Landemark	287/288 (1993)	529
Karlsson, U.O., see Wigren	289 (1993)	290
Karolewski, M.A. and R.G. Cavell, Characterization by SIMS of Brønsted acid chemisorption on MgO(100) and Cs/MgO(100)	290 (1993)	80
Kasai, H. and A. Okiji, Molecular vibration dynamics in molecule–surface interactions: subpicosecond transient infrared spectroscopy	283 (1993)	233
Kasai, H., see Okiji	287/288 (1993)	155
Kasemo, B., see Chakarov	287/288 (1993)	278
Kasemo, B., see Sjövall	290 (1993)	55
Kasuya, T., see Munakata	283 (1993)	452
Katircioglu, Ş., see Al-Hayek	286 (1993)	92
Kato, H., see Kittaka	282 (1993)	255
Kato, H., see Namiki	283 (1993)	9
Kato, H., see Aiura	283 (1993)	344
Kato, H., see Edamoto	287/288 (1993)	667
Kato, M., see Harder	289 (1993)	214
Kato, T., see Loo	284 (1993)	167
Kawai, M., see Hikita	287/288 (1993)	377
Kawamoto, K., see Nakanishi	287/288 (1993)	974
Kawamoto, S., K. Saitoh, M. Hirai, M. Kusaka and M. Iwami, Study of the Pd/Si(100)2×1 system using soft X-rays	287/288 (1993)	151
Kawamura, T. and M.R. Wilby, Transient growth in molecular beam epitaxy of Si on Si(100) vicinal surfaces	283 (1993)	360
Kawano, H., see Asada	286 (1993)	L554
Kawasaki, K., see Sugai	282 (1993)	67
Kawasaki, K., see Miki	287/288 (1993)	448
Kawasaki, K., see Sugai	287/288 (1993)	455
Kelber, J.A., see Prasad	289 (1993)	10
Kellogg, G.L., The effect of an externally applied electric field on the reconstruction of Pt(110)	290 (1993)	295
Kelly, D., see Verhoef	287/288 (1993)	94
Kelly, M.K., S. Zollner and M. Cardona, Modelling the optical response of surfaces measured by spectroscopic ellipsometry: application to Si and Ge	285 (1993)	282
Kempter, V., see Müller	284 (1993)	129
Kern, K., see Zeppenfeld	285 (1993)	L461
Kern, K., see Bucher	289 (1993)	370

Khanna, S.N., see Antonelli 289 (1993) L614
Khanra, B.C., see Bertolini 281 (1993) 102
Khoutami, A., see Senhaji 287/288 (1993) 371
Khoutami, A., B. Legrand and G. Tréglia, On a surprising anisotropy of surface segregation in CuPt alloys 287/288 (1993) 851
Kiejna, A., Image plane position at a charged surface of stabilized jellium 287/288 (1993) 618
Kim, B.C., see Park 283 (1993) 73
Kim, C., see Choi 281 (1993) 323
Kim, S.T., see Mangat 285 (1993) 102
Kim, Y.J., see Tran 281 (1993) 270
Kim, Y.J., see Herman 284 (1993) 23
Kimura, Y. and K. Takayanagi, Incommensurate phase of Sn/Si(100) studied by HR-REM 283 (1993) 349
King, D.A., see Barnes 281 (1993) 33
King, D.A., see Wander 281 (1993) 42
King, D.A., see Al-Sarraf 283 (1993) 427
King, D.A., see Hu 286 (1993) L542
King, D.A., see Hoogers 286 (1993) 306
King, D.A., see Dastoor 289 (1993) 279
Kinoshita, I., see Munakata 286 (1993) 73
Kioka, T., see Sugai 282 (1993) 67
Kioka, T., see Miki 287/288 (1993) 448
Kioka, T., see Sugai 287/288 (1993) 455
Kipp, L., C. Sellmer, R. Manzke and M. Skibowski, Unoccupied electronic states of Ge(001)2×1 by constant initial band photoemission 287/288 (1993) 520
Kirchner, E.J.J., see van Slooten 283 (1993) 27
Kishi, K., K. Hirai and T. Yamamoto, XPS and XAES study for oxidation of V/Cu(100) and V, Na/Cu(100) surfaces 290 (1993) 309
Kiskinova, M., see Morgante 285 (1993) 227
Kiss, J., see Liu 286 (1993) 233
Kitagawa, M., see Sakai 283 (1993) 84
Kitagawa, M., see Nitta 286 (1993) 346
Kitajima, M., see Nakamura 283 (1993) 255
Kitamura, K., see Nagao 290 (1993) 436
Kitamura, T., see Nagao 287/288 (1993) 391
Kittaka, S., T. Sasaki, N. Fukuhara and H. Kato, Fourier transform infrared spectroscopy of H_2O molecules on the Cr_2O_3 surface 282 (1993) 255
Kizhakevariam, N. and E.M. Stuve, Promotion and poisoning of the reaction of methanol on clean and modified platinum (100) 286 (1993) 246
Kjoller, K., see Zhong 290 (1993) L688
Klauser, R., see Seelmann-Eggebert 287/288 (1993) 495
Kleiman, G.G., R. Landers, S.G.C. de Castro and P.A.P. Nascente, Core-level Auger energy shifts in palladium alloys 287/288 (1993) 794
Kleiman, G.G., R. Landers, P.A.P. Nascente and S.G.C. de Castro, $L_3M_{4,5}M_{4,5}$ Auger transitions and screening mechanisms in the 4d metals 287/288 (1993) 798
Kleiman, G.G., see Landers 287/288 (1993) 802
Klekamp, A. and E. Umbach, Physisorption on an epitaxial NaCl(100) double-layer: SF_6 and xenon 284 (1993) 291
Kleyn, A.W., see van Slooten 283 (1993) 27
Kleyn, A.W., see Bot 287/288 (1993) 901
Knall, J., see Mayne 284 (1993) 247
Knappe, P., see Görling 286 (1993) 26

Knauff, O., see Grosche 281 (1993) L341
Knözinger, E., K.-H. Jacob, S. Singh and P. Hofmann, Hydroxyl groups as IR active surface probes on MgO crystallites 290 (1993) 388
Kobayashi, K., see Morikawa 283 (1993) 377
Kobayashi, K., see Fukutani 283 (1993) 447
Kobayashi, K., T. Suzuki and M. Tsukada, Theory of tip–surface gap dependence in laser-assisted scanning tunneling microscopy 285 (1993) 181
Kobayashi, K., see Tsukada 287/288 (1993) 1004
Kobayashi, Y., see Prabhakaran 290 (1993) 239
Kodama, S., see Ueda 283 (1993) 195
Koel, B.E., see Sellidj 281 (1993) 223
Koel, B.E., see Sellidj 284 (1993) 139
Koenders, L., see Troost 286 (1993) 97
Köhler, U., see Andersohn 284 (1993) 77
Koleske, D.D. and S.J. Sibener, Molecular dynamics simulations of the basal planes of Ni and Cu using Finnis–Sinclair potentials 290 (1993) 179
Koma, A., see Saiki 287/288 (1993) 644
Komaki, K., see Fukutani 283 (1993) 447
Komolov, S.A., see Møller 290 (1993) L677
Kondo, J., see Hirose 283 (1993) 244
Kondoh, H., M. Hara, K. Domen and H. Nozoye, Adsorption of hydrogen on Al(111) and Al(110): coverage and temperature dependence of adsorption states 287/288 (1993) 74
Kondoh, H., see Kuramochi 287/288 (1993) 217
Kondoh, H., see Kadowaki 287/288 (1993) 396
Kono, K., see Nakada 283 (1993) 414
Kono, K., see Albrecht 283 (1993) 423
Kono, S., N. Nakamura, K. Anno and S. Teruyama, Study of solid surfaces using micro-electron-beams 287/288 (1993) 1092
Kopatzki, E., S. Günther, W. Nichtl-Pecher and R.J. Behm, Homoepitaxial growth on Ni(100) and its modification by a preadsorbed oxygen adlayer 284 (1993) 154
Koppers, W.R., see Bot 287/288 (1993) 901
Kortright, J., see Capasso 287/288 (1993) 1046
Koshikawa, T., see Yasue 287/288 (1993) 1025
Koshizuka, N., see Ikeda 290 (1993) 207
Kostov, K.L., H. Rauscher and D. Menzel, The role of coadsorbed oxygen in NCO formation on Ru(001) 287/288 (1993) 283
Kosugi, T., Y. Usui and I. Arakawa, Adsorption/desorption hysteresis in the adsorption isotherms for Kr and Xe on exfoliated graphite 287/288 (1993) 862
Koutsos, V., see Spierings 287/288 (1993) 747
Kragten, D.D., see van Kooten 290 (1993) 302
Krasilnikov, A.B., A.V. Latyshev and A.L. Aseev, Transformation of a Si(111) stepped surface during the formation of a Si(3×1)Ca superstructure 290 (1993) 232
Krausch, G., R. Fink, K. Jacobs, B. Luckscheiter, J. Lohmüller, B.-U. Runge, U. Wöhrmann and G. Schatz, Indium adsorption on silicon surfaces: a PAC study 285 (1993) 81
Krawczyk, M. and W. Palczewska, A surface study on model Pd(111) catalyst modified with boron 287/288 (1993) 212
Krembel, C., see Rouyer 287/288 (1993) 935
Kruit, P., Nanometer resolution analysis of surfaces 287/288 (1993) 1067
Kruse, N., see Scandella 281 (1993) L331
Kruse, N., see Schumacher 289 (1993) L595
Kubota, M., Superfluidity of thin ^{4}He films adsorbed on well-difined porous glasses 283 (1993) 404

Kuch, W., M. Schulze, W. Schnurnberger and K. Bolwin, XPS lineshape analysis of potassium coadsorbed with water on Ni(111)	287/288	(1993)	600
Kudo, M., see Hikita	287/288	(1993)	377
Kuipers, L., see Frenken	283	(1993)	283
Kulakov, M.A., St. Werdin, P. Heuell and B. Bullemer, Modelling of pattern growth by vacancy diffusion and trapping on Si(111)7×7 surface	287/288	(1993)	241
Kunimori, K., H. Uetsuka, T. Iwade, T. Watanabe and S. Ito, Infrared chemiluminescence of CO and CO_2 produced by molecular-beam surface reactions	283	(1993)	58
Kunimori, K., see Kuramochi	287/288	(1993)	217
Küppers, J., see Lossev	284	(1993)	175
Kuramochi, H., F. Imai, H. Kondoh, K. Kunimori, T. Uchijima and H. Nozoye, Decomposition of cyclopentane on Ni(755): peculiar decomposition behavior of cyclopentane	287/288	(1993)	217
Kuroda, H., see Namba	283	(1993)	132
Kusaka, M., see Kawamoto	287/288	(1993)	151
Kusunoki, I., see Sugiyama	283	(1993)	64
Kusunoki, I., see Hashimoto	287/288	(1993)	46
Kuwahara, M., see Okuno	290	(1993)	421
Kuzembaev, E.K., see Taniguchi	290	(1993)	L711
Lacharme, J.-P., see Safta	287/288	(1993)	312
Lad, R.J., see Dake	289	(1993)	297
Lad, R.J., see Imaduddin	290	(1993)	35
Laiho, R. and H.J. Reittu, Theory of scanning tunneling microscopy with spin-polarized electrons obtained from a semiconducting tip	289	(1993)	363
Lamb, L.D., see Gallagher	281	(1993)	L335
Lamber, R. and N.I. Jaeger, Electron microscopy study of the interaction of Ni, Pd and Pt with carbon. III. Formation of a substitutional Pt–C carbide in ultrafine platinum particles	289	(1993)	247
Lambert, R.M., see Wytenburg	282	(1993)	205
Lambert, R.M., see Gordon	287/288	(1993)	114
Lambert, R.M., see Warren	287/288	(1993)	222
Lambert, R.M., see Poulston	287/288	(1993)	969
Lambin, Ph., see Conard	287/288	(1993)	382
Lamelas, F.J., see Lucas	286	(1993)	46
Lamont, C.L.A., H. Conrad and A.M. Bradshaw, The photodissociation of methyl bromide chemisorbed on Cu{111}: influence of pre-adsorbed bromine	287/288	(1993)	169
Land, D.P., W. Erley and H. Ibach, HREELS investigation of the orientation and dehydrogenation of cyclohexane on Pt[111]	289	(1993)	237
Landemark, E., C.J. Karlsson, Y.-C. Chao and R.I.G. Uhrberg, Dimer structure of the Si(001)2×1 and c(4×2) reconstructions derived from core-level and valence-band photoemission results	287/288	(1993)	529
Landers, R., see Kleiman	287/288	(1993)	794
Landers, R., see Kleiman	287/288	(1993)	798
Landers, R., P.A.P. Nascente, S.G.C. de Castro and G.G. Kleiman, Bremsstrahlung-excited LMN and LMM Auger spectra of Nb, Mo, Pd, and Ag	287/288	(1993)	802
Lapinskas, S., A. Rosengren and E.E. Tornau, Monte Carlo study of oxygen thermal desorption from $YBa_2Cu_3O_{6+x}$ compound	287/288	(1993)	50
Lapujoulade, J., see Barbier	287/288	(1993)	930
Larsen, P.K., see Ma	289	(1993)	47

Larson, S.A. and L.L. Lauderback, Oxidation kinetics of the top atomic layer of Al(100) from angle resolved SIMS 284 (1993) 1
Larsson, C.U.S., see Grehk 284 (1993) L384
Latyshev, A.V., see Krasilnikov 290 (1993) 232
Lau, M., see Löbus 287/288 (1993) 568
Lauber, J., see Görling 286 (1993) 26
Lauderback, L.L., see Larson 284 (1993) 1
Lausi, A., see Bellman 282 (1993) 273
Law, D.S.-L., see Mikheeva 287/288 (1993) 662
Lawless, M., see Blyholder 290 (1993) 155
Lazneva, E.F., see Møller 290 (1993) L677
Le Bossé, J.C., G. Hansali, J. Lopez, G. Wiatrowski and I. Zasada, Site occupancy pair correlation functions and structure factors of partially ordered overlayers. II. Application to O/Ni(100) 282 (1993) 389
Le Lay, G., R.L. Johnson, R. Seemann, F. Grey, R. Feidenhans'l and M. Nielsen, Electronic and crystallographic structures of 2D silver adlayers on Ge(111) 287/288 (1993) 539
Lee, G., P.T. Sprunger and E.W. Plummer, Surface plasmon dispersion and damping on Ag(110) 286 (1993) L547
Lee, J., see Park 283 (1993) 209
Lee, Li-Quan, see Zhou 290 (1993) L649
Legrand, B., see Barrett 286 (1993) 150
Legrand, B., see Senhaji 287/288 (1993) 371
Legrand, B., see Mottet 287/288 (1993) 476
Legrand, B., see Khoutami 287/288 (1993) 851
Lehmpfuhl, G., see Wang 284 (1993) L419
Lehmpfuhl, G., see Bao 284 (1993) 14
Leibbrandt, G.W.R., L.H. Spiekman and F.H.P.M. Habraken, Temperature dependence of thin oxide film growth on Fe(110) 287/288 (1993) 245
Leibbrandt, G.W.R., L.H. Spiekman and F.H.P.M. Habraken, Plane-specific oxide stoichiometries on Fe single-crystal surfaces 287/288 (1993) 250
Leiderer, P., see Albrecht 283 (1993) 383
Leiderer, P., see Albrecht 283 (1993) 419
Leiderer, P., see Albrecht 283 (1993) 423
Leiro, J.A., see Batirev 289 (1993) 357
Leiva, E., W. Schmickler and M. Urbakh, Second harmonic generation and the microscopic structure of the metal–electrolyte interface 287/288 (1993) 681
Lennerd, W.N., see Griffiths 284 (1993) L389
Li, D.G., N.S. McAlpine and D. Haneman, Surface barriers and potentials from luminescence on cleaved Si, GaAs, and InP 281 (1993) L315
Li, D.G., N.S. McAlpine and D. Haneman, Precision determination of long-wavelength cleavage luminescence energy and derivation of minimum surface state gap on clean cleaved Si surfaces 289 (1993) L609
Li, H. and S.Y. Tong, Forward-focusing and shadowing effects in solids 281 (1993) L347
Li, H. and S.Y. Tong, Imaging atoms in surface dimers of GaAs(001)-c(2×8)/(2×4) by electron-emission holography 282 (1993) 380
Li, X.Q.D., see Vanselow 281 (1993) L326
Li, Y. and M. Bowker, Acetate formation, stabilisation and surface explosion on Rh(111) 285 (1993) 219
Li, Y., see Yu 286 (1993) 116
Liang, S.H., see Capasso 287/288 (1993) 1046
Liang, Y. and D.A. Bonnell, Atomic structures of reduced $SrTiO_3$(001) surfaces 285 (1993) L510
Lie, A.B.K., see van Tol 287/288 (1993) 201

Lin, H.-J., see Idzerda 287/288 (1993) 741
Lin, J., A.T.S. Wee, A.C.H. Huan and K.L. Tan, SIMS study of the formic acid adsorption on polycrystalline copper and CuCl(111) surfaces 285 (1993) 31
Lin, J.C., see Yang 289 (1993) 267
Lin, J.S., see Gundersen 285 (1993) 27
Lin, M.C., see Chu 284 (1993) 281
Lin, M.C., see Bu 285 (1993) 243
Lin, R.F., see Zhou 284 (1993) 67
Lindblad, M. and T.A. Pakkanen, Cluster models for the interaction of HCl with non-polar surfaces of γ-Al_2O_3 286 (1993) 333
Lindgård, P.-A., see Vives 284 (1993) L449
Lindner, Th., see Herman 284 (1993) 23
Liu, C.-L. and J.B. Adams, Reply to "Comment on 'Structure and diffusion of clusters on Ni surfaces' by C. Massobrio" 289 (1993) L641
Liu, D., R.G. Albridge, A.V. Barnes, P.H. Bunton, C.S. Ewig, N.H. Tolk and M. Szymonski, The desorption of excited atoms by photon bombardment of alkali halide crystals 281 (1993) L353
Liu, F.C., see Maruyama 283 (1993) 333
Liu, H.T. and Z. Wu, The role of secondary electrons in electron-assisted adsorption process 290 (1993) L685
Liu, W., J.R. Lou and K.A.R. Mitchell, LEED crystallographic studies for the Rh(100)-p(2×2)-S and Rh(100)-c(2×2)-S surface structures 281 (1993) 21
Liu, X., see Zhuang 287/288 (1993) 260
Liu, X.-Y., The solid–fluid interface: a comparison and further description using the layer model 290 (1993) 403
Liu, Y. and P. Wynblatt, Study of a surface critical phenomenon associated with surface segregation in Cu–Ag alloys 290 (1993) 335
Liu, Z.-M., X.-L. Zhou, J. Kiss and J.M. White, Interaction of CF_3I with Pt(111) 286 (1993) 233
Liu, Z.F., A. Manivannan, H. Yanagi, M. Ashida, A. Fujishima and H. Inokuchi, Direct observation of the secondary structure of unfolded pseudomonas-cytochrome c_{551} by scanning tunneling microscopy 284 (1993) L411
Llorca, M.J., see Feliu 289 (1993) 152
Lloyd, G.W. and D.P. Woodruff, Do oxygen-induced Cu(410) facets reconstruct? 285 (1993) L503
Löber, R., see Hennig 287/288 (1993) 89
Löbus, S., M. Lau, R. Courths and S. Halilov, The Tamm surface state on ordered $Cu_3Au(001)$ 287/288 (1993) 568
Löffler, U., see Fritzsche 289 (1993) 389
Löffler, U., see Mendez 290 (1993) 45
Lohmüller, J., see Krausch 285 (1993) 81
Loo, B.H. and T. Kato, The bonding of acrylonitrile molecules to copper surfaces 284 (1993) 167
Lopez, J., see Le Bossé 282 (1993) 389
Lopez Sancho, J.M., M.C. Refolio, M.P. Lopez Sancho and J. Rubio, Extended Hubbard model analysis of semiconductor–alkali interfaces: implications for the metallization problem 285 (1993) L491
Lopez Sancho, M.P., see Lopez Sancho 285 (1993) L491
Lordi, S., see Ma 289 (1993) 47
Lossev, V. and J. Küppers, Adsorption of hydrogen on Be(0001) surfaces 284 (1993) 175
Lou, J.R., see Liu 281 (1993) 21
Lovrić, D. and B. Gumhalter, "Fast" and "slow" screening effects in inverse photoemission spectra of CO/Cu(110) 287/288 (1993) 789
Loy, M.M.T., see Budde 283 (1993) 143
Lozzi, L., see Di Nardo 287/288 (1993) 1087

Lucas, C.A., G.C.L. Wong, C.S. Dower, F.J. Lamelas and P.H. Fuoss, Initial stages in the epitaxial growth of NaCl on Ge(001)	286	(1993)	46
Luckscheiter, B., see Krausch	285	(1993)	81
Lüdecke, J., see Hulpke	287/288	(1993)	837
Ludviksson, A., C. Huang, H.J. Jänsch and R.M. Martin, Isotopic studies of the reaction of NO on silver surfaces	284	(1993)	328
Ludviksson, A., see Zhang	289	(1993)	1
Lundgren, E., J.N. Andersen, M. Qvarford and R. Nyholm, Layer dependent core level binding energy shifts: Na, K, Rb and Cs on Al(111)	281	(1993)	83
Lundgren, E., see Andersen	289	(1993)	307
Luntz, A.C., see Harris	287/288	(1993)	56
Lüthi, R., H. Haefke, P. Grütter, H.-J. Güntherodt, L. Szcześniak and K.P. Meyer, Surface and domain structures of ferroelectric GASH crystals studied by scanning force microscopy	285	(1993)	L498
Lyman, P.F., see Mullins	285	(1993)	L473
Lynden-Bell, R.M., see Todd	281	(1993)	191
Lytle, T.E., see Marton	282	(1993)	113
Ma, Y., S. Lordi, P.K. Larsen and J.A. Eades, Quantitative analyses of RHEED patterns from MBE grown GaAs(001)-2×4 surfaces	289	(1993)	47
Maboudian, R., see Bressler-Hill	287/288	(1993)	514
Mackrodt, W.C., see Taverner	287/288	(1993)	653
Madey, T.E., J. Guan, C.-Z. Dong and S.M. Shivaprasad, Morphological instabilities induced by ultrathin films on W(111)	287/288	(1993)	826
Madey, T.E., see Diebold	287/288	(1993)	896
Magnussen, O.M., J. Wiechers and R.J. Behm, In situ scanning tunneling microscopy observations of the potential-dependent (1×2) reconstruction on Au(110) in acidic electrolytes	289	(1993)	139
Maline, M., M. Ducarroir, F. Teyssandier, R. Hillel, R. Berjoan, F.J.J. Van Loo and W. Wakelkamp, Auger electron spectroscopy of compounds in the Si–Ti–C system. Characterization of Si–Ti–C multiphased materials obtained by CVD	286	(1993)	82
Malliaras, G.G., H.A. Wierenga and Th. Rasing, Study of the step structure of vicinal Si(110) surfaces using optical second harmonic generation	287/288	(1993)	703
Malò, C., see Bracco	287/288	(1993)	871
Manassidis, I., A. De Vita and M.J. Gillan, Structure of the (0001) surface of α-Al_2O_3 from first principles calculations	285	(1993)	L517
Mane Mane, see Cassuto	284	(1993)	273
Mane Mane, see Cassuto	287/288	(1993)	460
Mangat, P.S., S.T. Kim, K.M. Choudhary, Z. Hurych and P. Soukiassian, Polarization-dependent photoemission EXAFS investigation of the InP(110) surface structure	285	(1993)	102
Mangat, P.S., see Spiess	289	(1993)	L631
Manivannan, A., see Liu	284	(1993)	L411
Manzke, R., see Kipp	287/288	(1993)	520
Mapledoram, L.D., see Wander	281	(1993)	42
Marcus, P., see Maurice	284	(1993)	L431
Margaritondo, G., see Capasso	287/288	(1993)	1046
Mariani, C., see Abbati	281	(1993)	127
Mariani, C., see De Renzi	287/288	(1993)	550
Marinković, V., see Remškar	287/288	(1993)	409
Marks, L.D., see Xu	285	(1993)	L479

Marre, K. and H. Neddermeyer, Growth of ordered thin films of NiO on Ag(100) and Au(111)	287/288	(1993)	995
Mårtensson, N., see Nilsson	287/288	(1993)	758
Martin, R., see Gardner	287/288	(1993)	135
Martin, R.M., see Ludviksson	284	(1993)	328
Martin-Gago, J.A., J. Díaz, S. Ferrer and F. Comin, STM studies of Si evaporation on Si at RT by laser ablation	287/288	(1993)	911
Marton, D., K.J. Boyd, T.E. Lytle and J.W. Rabalais, Auger electron spectroscopy of krypton subplanted in graphite	282	(1993)	113
Maruyama, M., M. Bienfait, F.C. Liu, O.E. Vilches and F. Rieutord, Quasi-liquid molecular layer at solid hydrogen surfaces	283	(1993)	333
Maruyama, T., see Aiura	283	(1993)	344
Mase, K., see Fukutani	283	(1993)	158
Mase, K., see Peremans	283	(1993)	189
Mase, K., see Munakata	286	(1993)	73
Massardier, J., see Bertolini	281	(1993)	102
Massardier, J., see Bertolini	287/288	(1993)	346
Massobrio, C., Comment on 'Structure and diffusion on clusters on Ni surfaces by C.-L. Liu and J.B. Adams'	289	(1993)	L638
Masuda, S. and Y. Harada, Deexcitation of rare-gas metastable atoms on semiconductor surfaces: MoS_2 and $LaCoO_3$	283	(1993)	78
Materer, N., see Starke	286	(1993)	1
Materer, N., see Van Hove	287/288	(1993)	428
Materer, N., see Starke	287/288	(1993)	432
Materlik, G., see Eteläniemi	287/288	(1993)	288
Matsumoto, Y., see Sawabe	283	(1993)	126
Matsuo, J., F. Yannick and K. Karahashi, Reaction kinetics of chlorine on Si(111)7×7 surfaces	283	(1993)	52
Matsushima, T., see Ohno	281	(1993)	234
Matsushima, T., K. Shobatake and Y. Ohno, Spatial and velocity distributions of product desorption in carbon monoxide oxidation over palladium (110) and reconstructed platinum (110)(1×2) surfaces	283	(1993)	101
Matsushima, T., Y. Ohno and J.-I. Murakami, Spatial and velocity distributions of desorbing product carbon dioxide over a reconstructed platinum (110)(1×2) surface	287/288	(1993)	192
Mattera, L., see Canepa	287/288	(1993)	273
Matthai, C.C., see Shen	287/288	(1993)	672
Matzdorf, R., G. Meister and A. Goldmann, Temperature-dependent photoemission spectra from Cu(100) and Cu(111) surfaces	286	(1993)	56
Maurice, V., H. Talah and P. Marcus, Ex situ STM imaging with atomic resolution of Ni(111) electrodes passivated in sulfuric acid	284	(1993)	L431
Mayne, A.J., A.R. Avery, J. Knall, T.S. Jones, G.A.D. Briggs and W.H. Weinberg, An STM study of the chemisorption of C_2H_4 on Si(001)(2×1)	284	(1993)	247
McAlpine, N.S., see Li	281	(1993)	L315
McAlpine, N.S., see Li	289	(1993)	L609
McCartney, M.R., see Gajdardziska-Josifovska	284	(1993)	186
McCartney, M.R., see Gajdardziska-Josifovska	287/288	(1993)	1062
McConville, C.F., see Schweitzer	287/288	(1993)	545
McGilp, J.F., see Power	287/288	(1993)	708
McGilp, J.F., see O'Mahony	287/288	(1993)	713
McGovern, I.T., see Newstead	287/288	(1993)	317
McGovern, I.T., see Whittle	287/288	(1993)	554

McGrath, R., see Newstead 287/288 (1993) 317
Medvedev, I.G., Exact calculations of the ground state properties of hydrogen chemisorbed on a transition metal with one electron or hole in the energy band for the Anderson–Newns model 285 (1993) 117
Meigs, G., see Idzerda 287/288 (1993) 741
Meister, G., see Matzdorf 286 (1993) 56
Memmel, N., G. Rangelov and E. Bertel, Influence of the substrate on the band structure of alkali metal monolayers 285 (1993) 109
Mendez, M.A., see Fritzsche 289 (1993) 389
Mendez, M.A., C. Glück, M. Wagner, U. Löffler, R. Döll and K. Heinz, Sampling of diffuse LEED intensity distributions by conventional spot intensities 290 (1993) 45
Menzel, D., see Schlichting 285 (1993) 209
Menzel, D., see Allers 286 (1993) 297
Menzel, D., see Kostov 287/288 (1993) 283
Mesarwi, A. and A. Ignatiev, Interaction of Y overlayers with the GaAs(100) surface and oxidation of the Y/GaAs interface 282 (1993) 371
Methfessel, M., see Hennig 287/288 (1993) 89
Methfessel, M., D. Hennig and M. Scheffler, Ab-initio calculations of the initial- and final-state effects on the surface core-level shift of transition metals 287/288 (1993) 785
Meyer, J.A., Extraction of information contained in scanning tunneling microscope images 284 (1993) L416
Meyer, K.P., see Lüthi 285 (1993) L498
Michel, E.G., see Eteläniemi 287/288 (1993) 288
Michel, E.G., see Alvarez 287/288 (1993) 490
Michelsen, H.A., see Auerbach 283 (1993) 1
Miegge, P., see Bertolini 281 (1993) 102
Miegge, P., see Bertolini 287/288 (1993) 346
Mikheeva, M.N., V.G. Nazin, A.V. Svishchev, D.S.-L. Law, T.S. Turner, P. Bailey, D. Teehan, S.N. Barilo and P.V. Gritskov, Low temperature photoemission study of La_2CuO_{4+x} single crystals 287/288 (1993) 662
Miki, H., see Ohno 281 (1993) 234
Miki, H., see Sugai 282 (1993) 67
Miki, H., T. Nagase, K. Sato, H. Watanabe, S. Sugai, K. Kawasaki and T. Kioka, Structure of Pt(100) for NO adsorption studied by FEM and LEED 287/288 (1993) 448
Miki, H., see Sugai 287/288 (1993) 455
Miki-Yoshida, M., L. Rendón, S. Tehuacanero and M. José-Yacamán, Icosahedral, decahedral and single faulted particles obtained from carbon soot 284 (1993) L444
Milman, V., see Gundersen 285 (1993) 27
Minoda, H., Y. Tanishiro, N. Yamamoto and K. Yagi, Growth of Si on Si(111)$\sqrt{3} \times \sqrt{3}$–In surfaces studied by UHV-REM 287/288 (1993) 915
Minoguchi, T., Vortex confinement in superfluid films on porous media 283 (1993) 393
Miranda, R., see Alvarez 287/288 (1993) 490
Miret-Artés, S., see Hernández 290 (1993) L693
Mirkarimi, P.B., see Shinn 281 (1993) 1
Misewich, J.A., see Budde 283 (1993) 143
Mitchell, I.V., see Griffiths 284 (1993) L389
Mitchell, K.A.R., see Liu 281 (1993) 21
Mix, W., see Harder 289 (1993) 214
Miyake, T. and S. Yamamoto, Diffractive scattering of a helium molecular beam from monatomic layers on a W(110) surface 287/288 (1993) 340
Miyao, M., see Wada 285 (1993) 188
Miyazaki, E., see Edamoto 287/288 (1993) 667

Mizuno, S., see Tochihara 287/288 (1993) 423
Mizutani, G., see Sakai 283 (1993) 217
Mizutani, T., see Ide 287/288 (1993) 1013
Mochiji, K., see Ochiai 287/288 (1993) 175
Mochrie, S.G.J., see Abernathy 283 (1993) 260
Mochrie, S.G.J., see Sandy 287/288 (1993) 321
Mochrie, S.G.J., see Grübel 287/288 (1993) 842
Mokler, S.M., see Ohtani 284 (1993) 305
Molinaro, S., see Caputi 289 (1993) L591
Molinàs-Mata, P. and J. Zegenhagen, Defects of Ge(111)-c(2×8) – structural and electronic characterization 281 (1993) 10
Møller, P.J., see Dittmar-Wituski 287/288 (1993) 577
Møller, P.J., S.A. Komolov and E.F. Lazneva, Laser-induced CO_2 desorption from a CO/Cu/ZnO(0001) surface 290 (1993) L677
Molotkov, S.N., Theory of new modes for STM operation 287/288 (1993) 1098
Mönch, W., see Troost 286 (1993) 97
Monot, R., see Croci 290 (1993) L667
Montagono, M.M. and J. Cabané, Thermodynamics of sulphur adsorption on iron 285 (1993) L468
Montejano-Carrizales, J.M. and J.L. Morán-López, Oxygen chemisorption effects on the spatial atomic distribution of CuNi, CuPd and NiPt nanostructures 287/288 (1993) 1070
Morales de la Garza, L., see Hu 286 (1993) L542
Morán-López, J.L., see Montejano-Carrizales 287/288 (1993) 1070
Moretti, G. and P. Porta, Application of the Auger parameter in the characterization of small copper particles supported on insulators 287/288 (1993) 1076
Morgante, A., see Bellman 281 (1993) L321
Morgante, A., see Bellman 282 (1993) 273
Morgante, A., D. Cvetko, A. Santoni, K.C. Prince, V.R. Dhanak, G. Comelli and M. Kiskinova, A synchrotron radiation study of NO and oxygen on Rh(110) 285 (1993) 227
Moriarty, P., see Ettema 287/288 (1993) 1106
Morikawa, Y., K. Kobayashi and K. Terakura, First-principles molecular dynamics study of alkali-metal adsorption on a Si(001) surface 283 (1993) 377
Morikawa, Y., see Shi 290 (1993) 69
Morita, K., see Sasaki 283 (1993) 327
Moritz, W., see Stampfl 287/288 (1993) 418
Moritz, W., see Van Hove 287/288 (1993) 428
Moses, C.J., see Bracco 287/288 (1993) 871
Motta, N., A. Sgarlata, G. Gaggiotti, F. Patella, A. Balzarotti and M. De Crescenzi, Iron disilicide growth on Si(111): a scanning tunneling microscopy investigation 284 (1993) 257
Mottet, C., G. Tréglia and B. Legrand, Topology of a Ag monolayer on a Cu(111) substrate: a tight-binding quenched molecular dynamics study 287/288 (1993) 476
Müller, B.H., see Horn-von Hoegen 284 (1993) 53
Müller, H., R. Hausmann, H. Brenten and V. Kempter, Electrons from intra- and interatomic Auger processes in low-energy grazing collisions of H^+ and H_2^+ with W(110) partially covered by alkali atoms 284 (1993) 129
Müller, K., see Hammer 287/288 (1993) 84
Müller, N., see Hilgers 287/288 (1993) 414
Müller, P., see Sirringhaus 287/288 (1993) 1019
Müller-Gubler, E., see Sirringhaus 287/288 (1993) 1019
Mullins, C.B., see Verhoef 287/288 (1993) 94
Mullins, D.R. and P.F. Lyman, Sulfur-induced changes in the W(001) surface core level shift 285 (1993) L473
Munakata, T. and T. Kasuya, Laser based photoelectron spectromicroscope 283 (1993) 452

Munakata, T., K. Mase and I. Kinoshita, Two-photon photoemission from NO adsorbed on Cu(111)	286	(1993)	73
Mundt, C. and C. Benndorf, Influence of steps on the H_2O adsorption on Ni(s)(111)	287/288	(1993)	119
Murakami, J., see Hashimoto	287/288	(1993)	46
Murakami, J.-I., see Matsushima	287/288	(1993)	192
Murata, Y., see Okada	283	(1993)	41
Murata, Y., see Fukutani	283	(1993)	158
Murata, Y., see Peremans	283	(1993)	189
Murata, Y., see Egawa	283	(1993)	338
Murata, Y., see Fukutani	283	(1993)	447
Murata, Y., see Naoi	283	(1993)	457
Murata, Y., see Ishii	283	(1993)	462
Murata, Y., see Okada	287/288	(1993)	21
Murray, E., see Prasad	289	(1993)	10
Muryn, C.A., see Purdie	290	(1993)	L680
Myler, U., see Jacobi	284	(1993)	223
Myler, U., see Jensen	290	(1993)	L655
Mythen, C., see Soriano	281	(1993)	120
Nada, R., see Pisani	282	(1993)	185
Naegele, J.R., see Almeida	287/288	(1993)	141
Nagao, T., T. Kitamura, T. Iizuka, M. Umeuchi, C. Oshima and S. Otani, Deformation of octahedra at LaB_6(100) surface studied by HREELS	287/288	(1993)	391
Nagao, T., K. Kitamura, Y. Iizuka, C. Oshima and S. Otani, Surface phonons of LaB_6(100): deformation of boron octahedra at the surface	290	(1993)	436
Nagase, T., see Miki	287/288	(1993)	448
Nagashima, A., K. Nuka, K. Satoh, H. Itoh, T. Ichinokawa, C. Oshima and S. Otani, Electronic structure of monolayer graphite on some transition metal carbide surfaces	287/288	(1993)	609
Nagayoshi, H., Theoretical study of the electronic structure of the Si(111)$\sqrt{3} \times \sqrt{3}$:Sb surface	282	(1993)	163
Najafabadi, R. and D.J. Srolovitz, Order–disorder transitions at and segregation to (001) Ni–Pt surfaces	286	(1993)	104
Nakada, S., Y. Narahara and K. Kono, Interaction between third sound and surface irregularities	283	(1993)	414
Nakahata, T., see Niwa	282	(1993)	342
Nakai, Y., K. Hattori, A. Okano, T. Taguchi, J. Kanasaki and N. Itoh, Defect initiated particle emission from semiconductor surfaces by laser irradiation	283	(1993)	169
Nakamura, J., see He	283	(1993)	117
Nakamura, K.G. and M. Kitajima, Time-resolved Raman measurements of a graphite surface under ion irradiation	283	(1993)	255
Nakamura, M., M. Tsukada and M. Aono, Interaction of low-velocity rare-gas ions with a solid surface	283	(1993)	46
Nakamura, M., H. Ogasawara, J. Inukai and M. Ito, CO migration on Pt(100) and Pt(11 1 1) surfaces studied by time resolved infrared reflection–adsorption spectroscopy	283	(1993)	248
Nakamura, N., see Kono	287/288	(1993)	1092
Nakamura, T., see Namiki	283	(1993)	9
Nakanishi, S., K. Kawamoto and K. Umezawa, The initial stages of deposition of Au and Ag on Cu(001) studied by low-energy ion scattering	287/288	(1993)	974
Nakatani, S., see Takahashi	282	(1993)	17

Nakayama, K. and S. Usami, LEED and EELS studies on vanadium (110) and (111) single crystal surfaces 287/288 (1993) 355
Namba, H., T. Yamaguchi and H. Kuroda, Chemisorption and photo-decomposition of $(CH_3)_2GeH_2$ adsorbed on Si(100) studied by UPS and LEED 283 (1993) 132
Namiki, A., S. Suzuki, H. Kato, T. Nakamura and T. Suzaki, Dynamical study of alkali promotion of NO sticking on Si(100) 283 (1993) 9
Naoi, Y., K. Ito, Y. Uehara and Y. Murata, Very high resolution photoelectron spectra of NEA-GaAs 283 (1993) 457
Narahara, Y., see Nakada 283 (1993) 414
Narui, S., see Itoh 284 (1993) 236
Nascente, P.A.P., see Kleiman 287/288 (1993) 794
Nascente, P.A.P., see Kleiman 287/288 (1993) 798
Nascente, P.A.P., see Landers 287/288 (1993) 802
Naumović, D., J. Osterwalder, A. Stuck, P. Aebi and L. Schlapbach, Growth of Au on Cu(001) studied by full hemispherical photoelectron diffraction 287/288 (1993) 950
Navarro, O. and C. Wang, Electronic correlation in two-dimensional systems 287/288 (1993) 622
Nazin, V.G., see Mikheeva 287/288 (1993) 662
Neddermeyer, H., see Brodde 287/288 (1993) 988
Neddermeyer, H., see Marre 287/288 (1993) 995
Nekovee, M., see Crampin 287/288 (1993) 732
Nesbitt, A., see Rechtien 282 (1993) 137
Nesbitt, A., see Harder 287/288 (1993) 16
Nesbitt, A., see Harder 289 (1993) 214
Neugebauer, J., see Wenzien 287/288 (1993) 559
Neugebauer, J. and M. Scheffler, Theory of adsorption and desorption in high electric fields 287/288 (1993) 572
Neumann, A., K. Christmann and T. Solomun, Binding states and structural phase transformations upon iodine adsorption on a gold (100) surface 287/288 (1993) 593
Neurock, M., see Biemolt 287/288 (1993) 183
Newstead, K., A.W. Robinson, S. d'Addato, A. Patchett, N.P. Prince, R. McGrath, R. Whittle, E. Dudzik and I.T. McGovern, An X-ray absorption fine structure study of Ge(001)(2×1)–S 287/288 (1993) 317
Neyman, K.M. and N. Rösch, Negatively charged μ_3-ON species on Ag(111): a LCGTO-LDF cluster analysis of HREELS data 287/288 (1993) 64
Ng, W., see Capasso 287/288 (1993) 1046
Nichtl-Pecher, W., see Kopatzki 284 (1993) 154
Nichtl-Pecher, W., see Hammer 287/288 (1993) 84
Nicklin, C., see Dubot 282 (1993) 1
Niehus, H., see Raunau 284 (1993) L375
Niehus, H., see Raunau 286 (1993) 203
Niehus, H. and C. Achete, Surface structure investigation of nitrogen and oxygen on $Cu_3Au(100)$ 289 (1993) 19
Nielsen, H.B. and W. Thowladda, Position and linewidth of the K-induced 4s resonance on Ag(100): a two-photon photo-emission study 284 (1993) L426
Nielsen, M., see Stampfl 287/288 (1993) 418
Nielsen, M., see Le Lay 287/288 (1993) 539
Nieuwenhuys, B.E., see van Tol 287/288 (1993) 201
Nilsson, A., O. Björneholm, H. Tillborg, B. Hernnäs, R.J. Guest, A. Sandell, R.E. Palmer and N. Mårtensson, Core level spectroscopy of physisorbed molecules on graphite 287/288 (1993) 758
Nilsson, P.O., see Starnberg 287/288 (1993) 627
Nilsson, P.O., see Starnberg 287/288 (1993) 776

Ninomiya, K. and M. Hasegawa, Lateral resolution of microscopic X-ray photoelectron spectroscopy using a focused soft X-ray beam 287/288 (1993) 1051
Nishijima, M., M. Fujisawa, T. Takaoka and T. Sekitani, The reaction of benzene with Pd(110) and Pd(110)(1×2)–Cs surfaces 283 (1993) 121
Nitta, H., S. Shindo and M. Kitagawa, Classical theory of the dielectric function for an inhomogeneous electron gas 286 (1993) 346
Niwa, T., M. Sugiyama, T. Nakahata, O. Sakata and H. Hashizume, Structure of fluoride/GaAs(111) heteroepitaxial interfaces 282 (1993) 342
Noffke, J., see Weimert 289 (1993) 397
Noguera, C., see Goniakowski 284 (1993) 315
Noguera, C., J. Goniakowski and S. Bouette-Russo, Electronic structure of clean and hydroxylated oxide surfaces 287/288 (1993) 188
Nold, M., see Zimmermann 287/288 (1993) 876
Nomura, T., see Wada 285 (1993) 188
Norris, C., see Dubot 282 (1993) 1
Nørskov, J.K., K.W. Jacobsen, P. Stoltze and L.B. Hansen, Many-atom interactions in metals 283 (1993) 277
Nørskov, J.K., see Gundersen 285 (1993) 27
Nørskov, J.K., see Hansen 289 (1993) 68
Norton, P.R., see Griffiths 284 (1993) L389
Norton, P.R., see Esposto 290 (1993) 93
Norton, P.R., see Zhang 290 (1993) 103
Nowak, C., see Whittle 287/288 (1993) 554
Nozoye, H., see Kondoh 287/288 (1993) 74
Nozoye, H., see Kuramochi 287/288 (1993) 217
Nozoye, H., see Kadowaki 287/288 (1993) 396
Nozoye, H., see Shindo 287/288 (1993) 1030
Nuka, K., see Nagashima 287/288 (1993) 609
Nyholm, R., see Lundgren 281 (1993) 83
Nyholm, R., see Wigren 289 (1993) 290
Nyholm, R., see Andersen 289 (1993) 307

Obara, K., M. Shioga and T. Hirose, Phase transitions of adsorbed oxygen on niobium superfine particles 283 (1993) 387
O'Brien, W.L., see Rhodin 283 (1993) 109
Ochiai, I., T. Ogawa, Y. Takakuwa and K. Mochiji, Photon-stimulated desorption from chemically treated Si surfaces 287/288 (1993) 175
O'Connor, D.J., E.R. Wouters, A.W. Denier van der Gon, J. Vrijmoeth, P.M. Zagwijn, W.F.J. Slijkerman, J.W.M. Frenken and J.F. van der Veen, Oxidation of Al(111) 287/288 (1993) 438
Oden, P.I., see Sharp 284 (1993) L405
Oechsner, H., see Bock 282 (1993) 333
Ogasawara, H., see Nakamura 283 (1993) 248
Ogawa, T., see Ochiai 287/288 (1993) 175
Ogino, T., see Prabhakaran 290 (1993) 239
Ohno, M., P. Decleva and G. Fronzoni, Many-body calculations of the core excitation spectra of N_2 and NiN_2: inequivalent N atoms and disappearance of the giant shake-up satellite in NiN_2 284 (1993) 372
Ohno, S., see Uchikoshi 287/288 (1993) 1082
Ohno, Y., T. Matsushima and H. Miki, Anisotropy in the spatial distribution of reactive carbon dioxide desorption from narrow terraces on a reconstructed iridium (110)(1×2) surface 281 (1993) 234
Ohno, Y., see Matsushima 283 (1993) 101

Ohno, Y., see Matsushima 287/288 (1993) 192
Ohtani, N., S.M. Mokler, M.H. Xie, J. Zhang and B.A. Joyce, RHEED investigation of Ge surface segregation during gas source MBE of $Si/Si_{1-x}Ge_x$ heterostructures 284 (1993) 305
Ohtsuki, Y.H., see Sakai 283 (1993) 84
Okada, M. and Y. Murata, Scattering of very-low-energy D_2^+ ions from an Al(111) surface: neutralization and dissociation 283 (1993) 41
Okada, M. and Y. Murata, Sputtering of Al surface with very-low-energy ions 287/288 (1993) 21
Okano, A., see Nakai 283 (1993) 169
Oki, S., see Egawa 283 (1993) 338
Okiji, A., see Kasai 283 (1993) 233
Okiji, A. and H. Kasai, Electronic damping of molecular vibrations at metal surfaces: sub-picosecond transient pump–probe spectroscopy 287/288 (1993) 155
Okuno, Y., M. Kuwahara, M. Fukui and Y. Shintani, The effects of residual gases on optical constants of Al films 290 (1993) 421
Okuyama, H., see Uchikoshi 287/288 (1993) 1082
Oles, A.M., see Vinchon 287/288 (1993) 534
O'Mahony, J.D., J.F. McGilp, M.H.W. Verbruggen and C.F.J. Flipse, Au structures on Si(111) studied by spectroscopic ellipsometry and optical second harmonic generation 287/288 (1993) 713
Onda, N., see Sirringhaus 287/288 (1993) 1019
Onishi, H., T. Aruga and Y. Iwasawa, An unusual adsorption state of hydrogen on the Pd(100)-p(2×2)-p4g-Al bimetallic surface 283 (1993) 213
Ordonez, C.A., D.P. Russell and M. Portillo, F center random walk diffusion after electron irradiation of alkali halides 290 (1993) 113
Orlando, R., see Pisani 282 (1993) 185
Ormerod, R.M., see Wytenburg 282 (1993) 205
Oshima, C., see Nagao 287/288 (1993) 391
Oshima, C., see Nagashima 287/288 (1993) 609
Oshima, C., see Nagao 290 (1993) 436
Osovskii, V.D., see Chuikov 285 (1993) 75
Oster, K., see Radnik 287/288 (1993) 330
Osterwalder, J., see Saiki 282 (1993) 33
Osterwalder, J., see Naumović 287/288 (1993) 950
Osuch, K. and W.S. Verwoerd, Surface reconstruction of cubic boron nitride (001) 285 (1993) 59
Ota, K. and S. Usami, Study on the adsorption of oxygen and nitrogen on a W(100) surface with an analysis of electron energy-loss fine structure 287/288 (1993) 99
Otani, S., see Souda 283 (1993) 36
Otani, S., see Nagao 287/288 (1993) 391
Otani, S., see Nagashima 287/288 (1993) 609
Otani, S., see Edamoto 287/288 (1993) 667
Otani, S., see Nagao 290 (1993) 436
Otto, A., see Albrecht 283 (1993) 383
Otto, A., see Akemann 287/288 (1993) 104
Outlaw, R.A., see Davidson 281 (1993) 111
Over, H., see Stampfl 287/288 (1993) 418
Over, H., see Van Hove 287/288 (1993) 428

Pacchioni, G., Physisorbed and chemisorbed CO_2 at surface and step sites of the MgO(100) surface 281 (1993) 207
Pacchioni, G. and P.S. Bagus, Alkali adsorbates on metal surfaces: observable consequences of the ionic K/Cu(100) interaction 286 (1993) 317
Padmore, H.A., see Soriano 281 (1993) 120

Pakkanen, T.A., see Lindblad	286 (1993)	333
Palczewska, W., see Krawczyk	287/288 (1993)	212
Palmer, R.E., see Hock	284 (1993)	349
Palmer, R.E., see Šiller	287/288 (1993)	165
Palmer, R.E., see Barnard	287/288 (1993)	178
Palmer, R.E., see Nilsson	287/288 (1993)	758
Pan, J.-M., see Diebold	287/288 (1993)	896
Pan, X., see Ray	285 (1993)	66
Pankratov, O. and M. Scheffler, Electron correlations on a potassium-covered GaAs(110) surface: ab-initio calculations of the Hubbard correlation energy	287/288 (1993)	584
Pápai, I., J. Ushio and D.R. Salahub, Chemisorption of formate and acetate on cluster models of Rh and bimetallic RhSn clusters	282 (1993)	262
Parent, P., see Cassuto	287/288 (1993)	460
Park, K.H., B.C. Kim and H. Kang, Kinetic energy dependence of N^+ and N_2^+ reactions with Si(100)	283 (1993)	73
Park, S.C., C.H. Cho and C.H. Rhee, Theoretical studies of polyatomic reactions on metal surfaces: Al + $SiCl_4$ and Cu + $SiCl_4$ model systems	283 (1993)	70
Park, Y.-S., J.-S. Bang and J. Lee, Angular distribution of D_2 desorbing from the monodeuteride phase on a Si(100) surface	283 (1993)	209
Parker, S.F., see Raval	289 (1993)	227
Pashusky, A., see Afsin	284 (1993)	109
Passacantando, M., see Di Nardo	287/288 (1993)	1087
Patchett, A., see Newstead	287/288 (1993)	317
Patella, F., see Motta	284 (1993)	257
Paulsen-Boaz, C., see Rhodin	283 (1993)	109
Pavlovska, A., D. Dobrev and E. Bauer, Surface melting versus surface non-melting: an equilibrium shape study	286 (1993)	176
Peacor, S.D. and T. Hibma, LEED study of Na_xWO_3 tungsten bronze: structural relaxation of a perovskite surface	287/288 (1993)	403
Pellin, M.J., see Whitten	282 (1993)	97
Pendry, J.B., see Fritzsche	289 (1993)	389
Peng, X.D., see Fairbrother	285 (1993)	L455
Pennemann, B., see Radnik	287/288 (1993)	330
Peremans, A., see Fukutani	283 (1993)	158
Peremans, A., K. Fukutani, K. Mase and Y. Murata, UV photodesorption of CO from Pt(001) at 193 nm investigated by state-selective detection	283 (1993)	189
Perera, R., see Capasso	287/288 (1993)	1046
Persaud, R. and R.H. Prince, An inverse photoemission study of CO overlayers on Ru(0001)	282 (1993)	91
Persson, B.N.J., Polarizability of small spherical metal particles: influence of the matrix environment	281 (1993)	153
Petroff, P.M., see Bressler-Hill	287/288 (1993)	514
Pfnür, H., see Allers	286 (1993)	297
Pfnür, H., see Sokolowski	287/288 (1993)	831
Philippe, L., see Conard	287/288 (1993)	382
Picozzi, P., see Di Nardo	287/288 (1993)	1087
Piparo, E. and R. Girlanda, Linear and non-linear optical properties of surfaces and spatially non-local potentials	287/288 (1993)	699
Pirug, G., see Griffiths	284 (1993)	L389
Pisani, C., F. Corà, R. Orlando and R. Nada, Ab-initio perturbed-cluster study of carbon monoxide adsorption at a stepped LiF(001) surface	282 (1993)	185

Piveteau, B., D. Spanjaard and M.C. Desjonquères, Relative stability of ternary adsorption sites on (111) fcc and (0001) hcp transition-metal surfaces	287/288	(1993)	946
Plummer, E.W., see Ray	285	(1993)	66
Plummer, E.W., see Lee	286	(1993)	L547
Poehlmann, E., M. Schmitt, H. Hoinkes and H. Wilsch, Velocity distributions of carbondioxide molecules from the oxidation of CO on Pt(111)	287/288	(1993)	269
Polli, M., see Bellman	281	(1993)	L321
Polli, M., see Bellman	282	(1993)	273
Pond, K., see Bressler-Hill	287/288	(1993)	514
Ponzoni, C.A., see Gaines	290	(1993)	172
Pook, M., see Horn-von Hoegen	284	(1993)	53
Porta, P., see Moretti	287/288	(1993)	1076
Portillo, M., see Ordonez	290	(1993)	113
Potter, F.H. and R.G. Egdell, Electronic defect states at $Na_xWO_3(100)$ surfaces	287/288	(1993)	649
Potthoff, M., see Hilgers	287/288	(1993)	414
Poulston, S., M. Tikhov and R.M. Lambert, Oxygen chemisorption on lead and gold precovered Ru(100) surfaces	287/288	(1993)	969
Power, J.R. and J.F. McGilp, Resonance in the optical second harmonic response from the Si(111)–Sb interface	287/288	(1993)	708
Powers, J.M., see Van Hove	287/288	(1993)	428
Prabhakaran, K., Y. Kobayashi and T. Ogino, Chemically prepared oxides on Si(001): an XPS study	290	(1993)	239
Prasad, J., E. Murray and J.A. Kelber, Site selective chemistry of S, Cl and H_2O at the iron oxide surface	289	(1993)	10
Prince, K.C., see Bellman	281	(1993)	L321
Prince, K.C., see Bellman	282	(1993)	273
Prince, K.C., see Morgante	285	(1993)	227
Prince, N.P., see Grehk	284	(1993)	L384
Prince, N.P., see Newstead	287/288	(1993)	317
Prince, R.H., see Persaud	282	(1993)	91
Prins, M.W.J., see Spierings	287/288	(1993)	747
Prins, M.W.J., D.L. Abraham and H. van Kempen, Photo-assisted tunneling at ferromagnet/semiconductor interfaces	287/288	(1993)	750
Prins, R., see Scandella	281	(1993)	L331
Prins, R., see Schumacher	289	(1993)	L595
Prinz, G.A., see Idzerda	284	(1993)	L394
Prodan, A., see Remškar	287/288	(1993)	409
Prokes, S.M., see Jung	289	(1993)	L577
Prybyla, J.A. and P.J. Estrup, The effect of surface reconstruction on desorption: H/Mo(100)	290	(1993)	413
Ptushinskii, Yu.G., see Chuikov	285	(1993)	75
Puppin, E., see Finazzi	287/288	(1993)	264
Purdie, D., C.A. Muryn, S. Crook, P.L. Wincott, G. Thornton and D.A. Fischer, Potassium bond site in $ZnO(000\bar{1})p(2\times2)K$	290	(1993)	L680
Qvarford, M., see Lundgren	281	(1993)	83
Qvarford, M., see Andersen	289	(1993)	307
Rabalais, J.W., see Marton	282	(1993)	113
Rader, O., C. Carbone, W. Clemens, E. Vescovo, S. Blügel, W. Eberhardt and W. Gudat, Growth and magnetic behavior of Pd on Fe(100)	287/288	(1993)	736

Radnik, J., F. Gitmans, B. Pennemann, K. Oster and K. Wandelt, Adsorbate-induced structure transitions at the reconstructed Pt(100) surface 287/288 (1993) 330
Raeker, T.J., see Yang 290 (1993) 195
Raghavachari, K., see Jakob 285 (1993) 251
Rakova, E.V., RHEED study of the (0001)$LiNbO_3$ surface annealed at high temperature 287/288 (1993) 400
Ramsier, R.D. and J.T. Yates Jr., Thermal and electron-induced behavior of d_6-benzene-chromium-tricarbonyl adsorbed on Ag(111) 289 (1993) 39
Rangelov, G., see Memmel 285 (1993) 109
Rasing, Th., see Malliaras 287/288 (1993) 703
Rasing, Th., see Spierings 287/288 (1993) 747
Rasmussen, P.B., P.M. Holmblad, H. Christoffersen, P.A. Taylor and I. Chorkendorff, Dissociative adsorption of hydrogen on Cu(100) at low temperatures 287/288 (1993) 79
Rasmussen, P.B., see Chorkendorff 287/288 (1993) 208
Raunau, W., H. Niehus and G. Comsa, Epitaxial iron silicides on Si(001): an investigation with scanning tunneling microscopy and spectroscopy 284 (1993) L375
Raunau, W., H. Niehus, Th. Schilling and G. Comsa, Scanning tunneling microscopy and spectroscopy of iron silicide epitaxially grown on Si(111) 286 (1993) 203
Rauscher, H., see Kostov 287/288 (1993) 283
Rausenberger, B., W. Święch, W. Engel, A.M. Bradshaw and E. Zeitler, LEEM and selected-area LEED studies of reaction from propagation 287/288 (1993) 235
Raval, R., S.F. Parker and M.A. Chesters, C–H· · ·M interactions and orientational changes of cyclohexane on Cu(111): a RAIRS, EELS and LEED study 289 (1993) 227
Ravot, D., see Dubot 282 (1993) 1
Ray, K.B., X. Pan and E.W. Plummer, The interaction of H with Be(0001): a photoemission investigation 285 (1993) 66
Ray-Chaudhuri, A.K., see Capasso 287/288 (1993) 1046
Rechtien, J.-H., R. Harder, G. Herrmann, A. Nesbitt, K. Tellioglu and K.J. Snowdon, Direct measurement of the energy release and final molecular axis orientation in dissociative molecular scattering at surfaces 282 (1993) 137
Rechtien, J.-H., see Harder 289 (1993) 214
Refolio, M.C., see Lopez Sancho 285 (1993) L491
Rehn, V., see Erickson 281 (1993) 220
Reihl, B., see Johansson 287/288 (1993) 524
Reihl, B., see Dudde 287/288 (1993) 614
Reinhardt, P., see Schick 287/288 (1993) 960
Reining, L., see Cini 287/288 (1993) 693
Reittu, H.J., see Laiho 289 (1993) 363
Remškar, M., A. Prodan and V. Marinković, Charge-density wave modulation in surface layers of TaS_2 and NbS_2 287/288 (1993) 409
Rendón, L., see Miki-Yoshida 284 (1993) L444
Rettner, C.T., see Auerbach 283 (1993) 1
Rhee, C.H., see Park 283 (1993) 70
Rhodin, T.N., C. Paulsen-Boaz and W.L. O'Brien, Dynamics of pulsed ultraviolet laser enhancement of the chlorine–Si(111) reaction 283 (1993) 109
Rhodin, T.N., B.G. Frederick and G. Apai, Electronic, vibrational and chemical properties of alumina surfaces 287/288 (1993) 638
Richardson, N.V., see Schweitzer 287/288 (1993) 545
Richter, H.J., see Seelmann-Eggebert 287/288 (1993) 495
Richter, W., see Rossow 287/288 (1993) 718
Ricken, D.E., see Herman 284 (1993) 23
Rickman, J.M. and D.J. Srolovitz, Defect interactions on solid surfaces 284 (1993) 211

Rieder, K.H., see Gross 289 (1993) 180
Rieutord, F., see Maruyama 283 (1993) 333
Roberts, D.A., see Dillon 286 (1993) L535
Roberts, M.W., see Afsin 284 (1993) 109
Robinson, A.W., see Herman 284 (1993) 23
Robinson, A.W., see Newstead 287/288 (1993) 317
Robinson, M.B., see Dillon 286 (1993) L535
Rocca, M. and U. Valbusa, Electronic excitations on silver single crystal surfaces 287/288 (1993) 770
Rodach, Th., K.-P. Bohnen and K.M. Ho, First principles calculations of lattice relaxation at low index surfaces of Cu 286 (1993) 66
Rodríguez, A.M., G. Bozzolo and J. Ferrante, Multilayer relaxation and surface energies of fcc and bcc metals using equivalent crystal theory 289 (1993) 100
Rodriguez, J.A., The chemical properties of bimetallic surfaces: bonding between CO and Zn on Ru(001) 289 (1993) L584
Roeder, H., see Bucher 289 (1993) 370
Rolley, E., see Balibar 283 (1993) 290
Romahn, U., see Zimmermann 287/288 (1993) 876
Román, E., see Greenwood 287/288 (1993) 386
Rösch, N., see Görling 286 (1993) 26
Rösch, N., see Neyman 287/288 (1993) 64
Rosei, R., see Bellman 281 (1993) L321
Rosei, R., see Bellman 282 (1993) 273
Rosengren, A., see Lapinskas 287/288 (1993) 50
Rossow, U., U. Frotscher, W. Richter and D.R.T. Zahn, In situ optical characterisation with monolayer sensitivity: the As-terminated Si(111) surface 287/288 (1993) 718
Rotermund, H.H., Investigation of dynamic processes in adsorbed layers by photoemission electron microscopy (PEEM) 283 (1993) 87
Röthig, C., see Harder 289 (1993) 214
Rottmann, L., see Bärwinkel 287/288 (1993) 35
Rous, P.J., see Van Hove 287/288 (1993) 428
Rousseau, B., see Boutin 287/288 (1993) 866
Rousset, J.L., see Bertolini 281 (1993) 102
Rousset, J.L., see Bertolini 287/288 (1993) 346
Rousset, S., S. Chiang, D.E. Fowler and D.D. Chambliss, Epitaxial growth of Au on Ag(110) studied by scanning tunneling microscopy 287/288 (1993) 941
Rouyer, D., C. Krembel, M.C. Hanf, D. Bolmont and G. Gewinner, X-ray photoelectron diffraction from ultra-thin Cr layers on Au(100) and Ag(100): a comparison 287/288 (1993) 935
Rovida, G., see Bardi 282 (1993) L365
Rovida, G., see Atrei 290 (1993) 286
Rubio, J., see Lopez Sancho 285 (1993) L491
Rufael, T.S., see Huang 290 (1993) L673
Runge, B.-U., see Krausch 285 (1993) 81
Russell, D.P., see Ordonez 290 (1993) 113
Ryder, P.L., see Tonscheidt 281 (1993) 51

Sacchi, M., see Soriano 290 (1993) 427
Safta, N., J.-P. Lacharme and C.A. Sébenne, Clean Si(110): a surface with intrinsic or extrinsic defects? 287/288 (1993) 312
Sagurton, M., see Saiki 282 (1993) 33
Said, M., M.C. Desjonquères and D. Spanjaard, Core level shifts at bcc transition metal surfaces deduced from the calculation of surface segregation energies 287/288 (1993) 780

Saiki, K., W.R. Xu and A. Koma, A novel surface excitation in highly ionic fluorides 287/288 (1993) 644
Saiki, R.S., A.P. Kaduwela, M. Sagurton, J. Osterwalder, D.J. Friedman, C.S. Fadley and C.R. Brundle, X-ray photoelectron diffraction and low-energy electron diffraction study of the interaction of oxygen with the Ni(001) surface: c(2×2) to saturated oxide 282 (1993) 33
Saito, S., see Hongo 287/288 (1993) 588
Saito, Y., see Uwaha 283 (1993) 366
Saitoh, K., see Kawamoto 287/288 (1993) 151
Sakai, H., Y.H. Ohtsuki and M. Kitagawa, Calculation of the dynamical image potential at metal surfaces 283 (1993) 84
Sakai, J., G. Mizutani and S. Ushioda, Bonding of O_2, CO_2, and CO on a Cs/p-GaAs(100) surface and its relation to negative electron affinity 283 (1993) 217
Sakata, O., see Niwa 282 (1993) 342
Sakisaka, Y., see Aiura 283 (1993) 344
Sakka, Y., see Uchikoshi 287/288 (1993) 1082
Sakout, T., see Serruys 282 (1993) 279
Salahub, D.R., see Pápai 282 (1993) 262
Salanon, B., see Barbier 287/288 (1993) 930
Sales, J.L., see Zgrablich 290 (1993) 163
Salvietti, M., see Canepa 287/288 (1993) 273
Samson, Y., see Bertolini 281 (1993) 102
Samuelsen, D., A. Yang and W. Schattke, Detection of the longitudinal photon field in surface screening 287/288 (1993) 676
Sandell, A., see Nilsson 287/288 (1993) 758
Sander, M., see Johnson 290 (1993) 213
Sandy, A.R., see Abernathy 283 (1993) 260
Sandy, A.R., S.G.J. Mochrie, D.M. Zehner, G. Grübel, K.G. Huang and D. Gibbs, Au(111) and Pt(111) surface phase behavior 287/288 (1993) 321
Sandy, A.R., see Grübel 287/288 (1993) 842
Santaniello, A., see Caputi 282 (1993) 62
Santaniello, A., see Caputi 289 (1993) L591
Santoni, A., see Morgante 285 (1993) 227
Santucci, S., see Di Nardo 287/288 (1993) 1087
Sanz, J.M., see Soriano 281 (1993) 120
Sanz, J.M., see Soriano 290 (1993) 427
Sarid, D., see Gallagher 281 (1993) L335
Sasaki, M., J. Yuhara, M. Inoue and K. Morita, Studies on 2D Au–Cu binary adsorbates on Si(111) surfaces by means of combined LEED/AES/RBS techniques 283 (1993) 327
Sasaki, T., see Kittaka 282 (1993) 255
Sasaki, T.A., see Baba 287/288 (1993) 806
Sato, K., see Miki 287/288 (1993) 448
Sato, M., Ion current characteristics of an Ar field ionization source 285 (1993) L525
Sato, S. and Y. Ukisu, Mechanism of the photolysis of iron pentacarbonyl adsorbed on a Pt surface 283 (1993) 137
Satoh, K., see Nagashima 287/288 (1993) 609
Satoh, T., see Watanabe 287/288 (1993) 502
Sautet, P., see Girard 282 (1993) 400
Sawabe, K. and Y. Matsumoto, Laser-induced photochemistry of nitrous oxide on a Pt(111) surface 283 (1993) 126
Sawamura, M., see Tsukada 283 (1993) 182
Scagliotti, M., see Abbati 281 (1993) 127

Scalas, E., see Ferrando 281 (1993) 178
Scalas, E., see Ferrando 287/288 (1993) 907
Scandella, L., N. Kruse and R. Prins, Imaging of zeolite surface structures by atomic force microscopy 281 (1993) L331
Scandella, L., see Schumacher 289 (1993) L595
Schäfer, J., see Schick 287/288 (1993) 960
Schattke, W., see Samuelsen 287/288 (1993) 676
Schatz, G., see Krausch 285 (1993) 81
Schaub, T., see Tarrach 285 (1993) 1
Schauer, S.N., R. Thomas and P. Williams, Energy distributions of ions produced by electron-stimulated desorption 290 (1993) 277
Scheffler, M., see Stampfl 287/288 (1993) 418
Scheffler, M., see Wenzien 287/288 (1993) 559
Scheffler, M., see Neugebauer 287/288 (1993) 572
Scheffler, M., see Pankratov 287/288 (1993) 584
Scheffler, M., see Methfessel 287/288 (1993) 785
Schick, M., J. Schäfer, K. Kalki, G. Ceballos, P. Reinhardt, H. Hoffschulz and K. Wandelt, Miscibility within monolayer Ag–Cu films on Ru(0001) 287/288 (1993) 960
Schick, M., see Schmidt 287/288 (1993) 983
Schildbach, M.A. and A.V. Hamza, Clean and water-covered sapphire ($1\bar{1}02$) surfaces: structure and laser-induced desorption 282 (1993) 306
Schilling, Th., see Raunau 286 (1993) 203
Schimizu, T., see Tsukada 287/288 (1993) 1004
Schindler, K.-M., see Dippel 287/288 (1993) 465
Schirm, K.M., see Spiess 289 (1993) L631
Schlapbach, L., see Naumović 287/288 (1993) 950
Schlichting, H. and D. Menzel, Techniques for wide range, high resolution and precision, thermal desorption measurements. I. Principles of apparatus and operation 285 (1993) 209
Schlögl, R., see Bao 284 (1993) 14
Schmickler, W., see Leiva 287/288 (1993) 681
Schmid, M., see Stadler 287/288 (1993) 366
Schmidt, J., Ch. Stuhlmann and H. Ibach, Oxygen adsorption on the Pt(110)(1×2) surface studied with EELS 284 (1993) 121
Schmidt, M., H. Wolter, M. Schick, K. Kalki and K. Wandelt, Compression phases in copper/oxygen coadsorption layers on a Ru(0001) surface 287/288 (1993) 983
Schmidt, S., see Cassuto 284 (1993) 273
Schmitt, M., see Poehlmann 287/288 (1993) 269
Schneider, U., G.R. Castro and K. Wandelt, Adsorption on ordered $Cu_3Pt(111)$: site selectivity 287/288 (1993) 146
Schnurnberger, W., see Kuch 287/288 (1993) 600
Schommers, W., see Zimmermann 287/288 (1993) 876
Schulz-Ekloff, G., see Tonscheidt 281 (1993) 51
Schulze, M., see Kuch 287/288 (1993) 600
Schumacher, A., L. Scandella, N. Kruse and R. Prins, Single-layer MoS_2 on mica: studies by means of scanning force microscopy 289 (1993) L595
Schuster, R., see Bao 284 (1993) 14
Schweitzer, M.O., T.S. Jones, C.F. McConville and N.V. Richardson, The deposition of a thin Au film on InSb(100) 287/288 (1993) 545
Sebastian, K.L. and G. Doyen, Electrochemical scanning tunneling microscopy: does the orientational polarization of the liquid play any role? 290 (1993) L703
Sébenne, C.A., see Safta 287/288 (1993) 312

Seehofer, L., G. Falkenberg and R.L. Johnson, STM study of the structure and phases of Pb on Ge(111) 290 (1993) 15
Seelmann-Eggebert, M., G.P. Carey, R. Klauser and H.J. Richter, A case study for XPD in the presence of a compositional depth profile: interface formation between metals (Ag, Al) and HgCdTe 287/288 (1993) 495
Seemann, R., see Le Lay 287/288 (1993) 539
Sekitani, T., see Nishijima 283 (1993) 121
Sekoguchi, M., Y. Uehara and S. Ushioda, Combined Raman/HREELS study of ZnSe–ZnS strained-layer superlattices 283 (1993) 355
Selke, W. and T. Bieker, Morphological changes of periodic surface profiles 281 (1993) 163
Sellidj, A. and B.E. Koel, Growth mechanism and structure of ultrathin Pd films vapor-deposited on Ta(110) 281 (1993) 223
Sellidj, A. and B.E. Koel, CO chemisorption properties of ultrathin Pd films on Ta(110) 284 (1993) 139
Sellmer, C., see Kipp 287/288 (1993) 520
Selloni, A., see Takeuchi 287/288 (1993) 303
Selloni, A., see Vittadini 289 (1993) L625
Senhaji, A., see Barrett 286 (1993) 150
Senhaji, A., G. Tréglia, J. Eugène, A. Khoutami and B. Legrand, Alloy surfaces and surface alloys: from equilibrium to kinetics 287/288 (1993) 371
Seraphin, S., see Gallagher 281 (1993) L335
Serruys, Y., T. Sakout and D. Gorse, Anodic oxidation of titanium in 1M H_2SO_4, studied by Rutherford backscattering 282 (1993) 279
Seto, T., see Teraoka 283 (1993) 371
Sgarlata, A., see Motta 284 (1993) 257
Shamir, J., see Gardner 287/288 (1993) 135
Sharma, J.K.N., B.R. Chakraborty and S. Bera, Study of oxidation and silicidation of Ta by electron impact autoionization process 285 (1993) 237
Sharp, T.G., P.I. Oden and P.R. Buseck, Lattice-scale imaging of mica and clay (001) surfaces by atomic force microscopy using net attractive forces 284 (1993) L405
Shelef, M., see Ward 289 (1993) 85
Shen, T.H. and C.C. Matthai, Calculation of the optical properties of As molecules on Si substrates 287/288 (1993) 672
Shi, X., D. Tang, D. Heskett, K.-D. Tsuei, H. Ishida and Y. Morikawa, Coverage-dependent core level photoemission investigations of Na/Cu(111) and Na/Ni(111) 290 (1993) 69
Shimizu, K., see Sugai 287/288 (1993) 455
Shindo, H. and H. Nozoye, Atomic force microscopic study of structures of cleaved surfaces of $CaSO_4$ after wet chemical etching 287/288 (1993) 1030
Shindo, S., see Nitta 286 (1993) 346
Shinjo, K. and M. Hirano, Dynamics of friction: superlubric state 283 (1993) 473
Shinn, M., P.B. Mirkarimi and S.A. Barnett, Nucleation of lattice-mismatched transition-metal nitride films: limitations on superlattice growth 281 (1993) 1
Shintani, Y., see Okuno 290 (1993) 421
Shioga, M., see Obara 283 (1993) 387
Shivaprasad, S.M., see Madey 287/288 (1993) 826
Shobatake, K., see Matsushima 283 (1993) 101
Shuliatev, D.A., see Bolotin 287/288 (1993) 630
Shustorovich, E. and A.T. Bell, Decomposition and reduction of NO on transition metal surfaces: bond order conservation Morse potential analysis 289 (1993) 127
Sibener, S.J., see Koleske 290 (1993) 179
Sieben, B. and H.P. Bonzel, Adsorption of H_2 and CO on Mn/Fe(110) surfaces 282 (1993) 246

Šiller, L., K.M. Hock, R.E. Palmer and J.F. Wendelken, Resonance electron scattering by adsorbed molecules: σ^* resonance energy versus bond length 287/288 (1993) 165
Singh, S., see Knözinger 290 (1993) 388
Sirringhaus, H., N. Onda, E. Müller-Gubler, P. Müller, St. Zehnder and H. von Känel, Fundamental phenomena in heteroepitaxial growth studied by scanning tunneling microscopy 287/288 (1993) 1019
Sjövall, P., see Chakarov 287/288 (1993) 278
Sjövall, P. and B. Kasemo, A TDS study of oxygen, water and carbon dioxide coadsorption with potassium on graphite 290 (1993) 55
Skibowski, M., see Kipp 287/288 (1993) 520
Slijkerman, W.F.J., see O'Connor 287/288 (1993) 438
Smith, D.J., see Gajdardziska-Josifovska 287/288 (1993) 1062
Smith, N.V., G.K. Wertheim, A.B. Andrews and C.T. Chen, Inelastic electron mean free paths in the alkali metals: effect of the empty d bands 282 (1993) L359
Smith, P.V., see Zheng 282 (1993) 173
Smith, P.V., see Craig 285 (1993) 295
Smith, P.V., see Craig 290 (1993) L662
Smith, R.J., A. Kara and S. Holloway, A molecular dynamics study for the trapping and scattering of Ar/Pt(111) 281 (1993) 296
Sneddon, D.D., see Cruickshank 281 (1993) L308
Snowdon, K.J., see Rechtien 282 (1993) 137
Snowdon, K.J., see Harder 287/288 (1993) 16
Snowdon, K.J., see Harder 289 (1993) 214
Snyder, E.J., see Eklund 285 (1993) 157
Sokolowski, M. and H. Pfnür, Critical behaviour of the p(2×2) and $(\sqrt{3}\times\sqrt{3})$R30° order–disorder phase transitions of S/Ru(001) 287/288 (1993) 831
Solomun, T., see Neumann 287/288 (1993) 593
Solymosi, F., A. Berkó and Z. Tóth, Adsorption and dissociation of CH_3OH on clean and K-promoted Pd(100) surfaces 285 (1993) 197
Somorjai, G.A., see Starke 286 (1993) 1
Somorjai, G.A., see Van Hove 287/288 (1993) 428
Somorjai, G.A., see Starke 287/288 (1993) 432
Song, Y. and R. Gomer, Diffusion of oxygen on the Mo(110) plane 290 (1993) 1
Soriano, L., M. Abbate, J.C. Fuggle, C. Jiménez, J.M. Sanz, L. Galán, C. Mythen and H.A. Padmore, The interaction of nitrogen with titanium studied by soft X-ray absorption spectroscopy: adsorption versus implantation 281 (1993) 120
Soriano, L., M. Abbate, J. Vogel, J.C. Fuggle, A. Fernández, A.R. González-Elipe, M. Sacchi and J.M. Sanz, Chemical changes induced by sputtering in TiO_2 and some selected titanates as observed by X-ray absorption spectroscopy 290 (1993) 427
Soszka, W., Impact collision ion scattering spectroscopy at large incidence angles as a method for studying rare-gas adsorption 287/288 (1993) 69
Souda, R., W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Chemical effects on dynamical charge transfer: D^+ on K-adsorbed Pt(111), Si(100) and Si(111) surfaces 283 (1993) 36
Souda, R., W. Hayami, T. Aizawa and Y. Ishizawa, Low energy D^+ scattering from clean and alkalated TiO_2(110) surfaces 285 (1993) 265
Souda, R., W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy D^+ scattering from Cs and CsCl adsorbed on the Si(100)2×1 surface 290 (1993) 245
Soukiassian, P., see Mangat 285 (1993) 102
Soukiassian, P., see Spiess 289 (1993) L631
Spadacini, R., see Ferrando 287/288 (1993) 886
Spanjaard, D., see Vinchon 287/288 (1993) 534

Spanjaard, D., see Said 287/288 (1993) 780
Spanjaard, D., see Piveteau 287/288 (1993) 946
Spiekman, L.H., see Leibbrandt 287/288 (1993) 245
Spiekman, L.H., see Leibbrandt 287/288 (1993) 250
Spierings, G., V. Koutsos, H.A. Wierenga, M.W.J. Prins, D.L. Abraham and Th. Rasing, Optical second harmonic generation study of interface magnetism 287/288 (1993) 747
Spiess, L., P.S. Mangat, S.-P. Tang, K.M. Schirm, A.J. Freeman and P. Soukiassian, Combined theoretical and experimental determination of the atomic structure and adsorption site of Na on the Si(100)2×1 surface 289 (1993) L631
Sprösser, J., see Barbier 287/288 (1993) 930
Sprunger, P.T., see Lee 286 (1993) L547
Srivastava, D., see Crowley 284 (1993) 91
Srolovitz, D.J., see Rickman 284 (1993) 211
Srolovitz, D.J., see Najafabadi 286 (1993) 104
Stadler, H., W. Hofer, M. Schmid and P. Varga, Embedded-atom method calculations applied to surface segregation of Pt–Ni single crystals 287/288 (1993) 366
Stair, P.C., see Fairbrother 285 (1993) L455
Stair, P.C., see Strupp 290 (1993) L699
Stammler, W., see Hammer 287/288 (1993) 84
Stampfl, C., J. Burchhardt, M. Nielsen, D.L. Adams, M. Scheffler, H. Over and W. Moritz, The structure of Al(111)–K-($\sqrt{3} \times \sqrt{3}$)R30° determined by LEED: stable and metastable adsorption sites 287/288 (1993) 418
Starke, U., A. Barbieri, N. Materer, M.A. Van Hove and G.A. Somorjai, Ethylidyne on Pt(111): determination of adsorption site, substrate relaxation and coverage by automated tensor LEED 286 (1993) 1
Starke, U., see Van Hove 287/288 (1993) 428
Starke, U., N. Materer, A. Barbieri, R. Döll, K. Heinz, M.A. Van Hove and G.A. Somorjai, A low-energy electron diffraction study of oxygen, water and ice adsorption on Pt(111) 287/288 (1993) 432
Starnberg, H.I., P.O. Nilsson and H.P. Hughes, Adsorbate induced enhancement of secondary electron emission from the layered compound VSe_2 287/288 (1993) 627
Starnberg, H.I. and P.O. Nilsson, Thermal effects in angle-resolved photoemission: is it possible to separate direct and indirect transitions? 287/288 (1993) 776
Steinrück, H.-P., see Weinelt 287/288 (1993) 471
Stephenson, J.C., see Cavanagh 283 (1993) 226
Stickney, J.L., see Suggs 290 (1993) 362
Stickney, J.L., see Suggs 290 (1993) 375
Stöhr, J., see Xu 289 (1993) L599
Stoltze, P., see Nørskov 283 (1993) 277
Stoltze, P., see Hansen 289 (1993) 68
Stolz, H., see Höfer 287/288 (1993) 130
Stolz, H., M. Höfer and H.-W. Wassmuth, TPD, AES, $\Delta\phi$ and LEED investigations of cesium adsorbed on Ag(100) 287/288 (1993) 564
Storz, R., see Fann 283 (1993) 221
Strupp, P.G., P.C. Stair and E. Weitz, Three-photon photoemission from Cu(100): observation of an unoccupied surface state near $\bar{\Gamma}$ 290 (1993) L699
Stuck, A., see Naumović 287/288 (1993) 950
Stuckless, J.T., see Al-Sarraf 283 (1993) 427
Stuhlmann, Ch., see Schmidt 284 (1993) 121
Stuve, E.M., see Kizhakevariam 286 (1993) 246

Su, C., M. Xi, Z.-G. Dai, M.F. Vernon and B.E. Bent, Dry etching of GaAs with Cl_2: correlation between the surface Cl coverage and the etching rate at steady state — 282 (1993) 357
Sugai, S., K. Takeuchi, T. Ban, H. Miki, K. Kawasaki and T. Kioka, Adsorption and dissociation of NO on Pt(100) and (310) studied by AES, UPS and XPS — 282 (1993) 67
Sugai, S., see Miki — 287/288 (1993) 448
Sugai, S., K. Shimizu, H. Watanabe, H. Miki, K. Kawasaki and T. Kioka, Chemisorption of NO on Pt(210) studied by UPS, XPS and AES — 287/288 (1993) 455
Suggs, D.W. and J.L. Stickney, Studies of the structures formed by the alternated electrodeposition of atomic layers of Cd and Te on the low-index planes of Au. I. LEED and Auger studies — 290 (1993) 362
Suggs, D.W. and J.L. Stickney, Studies of the surface structures formed by the alternated electrodeposition of Cd and Te on the low-index planes of Au. II. STM studies — 290 (1993) 375
Sugiyama, K., Y. Igari and I. Kusunoki, A molecular beam study of desorption kinetics of GeO from Ge(111) surfaces — 283 (1993) 64
Sugiyama, M., see Niwa — 282 (1993) 342
Sukretnyi, V.G., see Chuikov — 285 (1993) 75
Sumita, I., see Yasue — 287/288 (1993) 1025
Surnev, S., Interaction of oxygen with a Ge-covered Si(100) surface — 282 (1993) 10
Suzaki, T., see Namiki — 283 (1993) 9
Suzuki, S., see Namiki — 283 (1993) 9
Suzuki, T., see Kobayashi — 285 (1993) 181
Svishchev, A.V., see Mikheeva — 287/288 (1993) 662
Święch, W., see Rausenberger — 287/288 (1993) 235
Szcześniak, L., see Lüthi — 285 (1993) L498
Szymonski, M., see Liu — 281 (1993) L353
Szymonski, M., see Aebi — 285 (1993) 275

Tabata, Y., see Teraoka — 287/288 (1993) 754
Taguchi, T., see Nakai — 283 (1993) 169
Takagi, S., see Gotoh — 287/288 (1993) 31
Takagi, S. and T. Gotoh, Observation of a titanium surface by desorbed ion images with a scanning electron microscope — 287/288 (1993) 361
Takahashi, T. and S. Nakatani, Refinement of the Si(111)$\sqrt{3} \times \sqrt{3}$–Ag structure by surface X-ray diffraction — 282 (1993) 17
Takakuwa, Y., see Ochiai — 287/288 (1993) 175
Takamuku, K., see Ikeda — 290 (1993) 207
Takano, A., see Ueda — 283 (1993) 195
Takano, A. and K. Ueda, Electron stimulated desorption of O^+ from CO adsorbed on a Ni(110) surface — 283 (1993) 199
Takano, A. and K. Ueda, Energy distributions of oxygen ions desorbed from CO- and NO-covered nickel — 287/288 (1993) 25
Takano, A., see Ueda — 287/288 (1993) 506
Takaoka, T., see Nishijima — 283 (1993) 121
Takayanagi, K., see Kimura — 283 (1993) 349
Takeuchi, K., see Sugai — 282 (1993) 67
Takeuchi, N., A. Selloni and E. Tosatti, First principles calculations of the cleaved and annealed Ge(111) surfaces — 287/288 (1993) 303
Talah, H., see Maurice — 284 (1993) L431
Tan, K.L., see Lin — 285 (1993) 31
Tanabe, H., see Itoh — 284 (1993) 236

Tanaka, H., see Yasue 287/288 (1993) 1025
Tanaka, K., see He 283 (1993) 117
Tanaka, K., see Taniguchi 290 (1993) L711
Tang, D., see Shi 290 (1993) 69
Tang, S.-P., see Spiess 289 (1993) L631
Taniguchi, M., E.K. Kuzembaev and K. Tanaka, A mimic model of Pt–Rh catalyst prepared by electrochemical deposition of Rh on the Pt(100) surface 290 (1993) L711
Tanishiro, Y., see Minoda 287/288 (1993) 915
Tardy, B., see Bertolini 281 (1993) 102
Tardy, B., see Bertolini 287/288 (1993) 346
Tarrach, G., D. Bürgler, T. Schaub, R. Wiesendanger and H.-J. Güntherodt, Atomic surface structure of $Fe_3O_4(001)$ in different preparation stages studied by scanning tunneling microscopy 285 (1993) 1
Tatarek, R., see Bracco 287/288 (1993) 871
Taverner, A.E., P.C. Hollamby, P.S. Aldridge, R.G. Egdell and W.C. Mackrodt, An inverse photoemission study of empty electronic states in TiO_2 287/288 (1993) 653
Taylor, P.A., see Rasmussen 287/288 (1993) 79
Taylor, P.A., see Chorkendorff 287/288 (1993) 208
Teehan, D., see Mikheeva 287/288 (1993) 662
Tehuacanero, S., see Miki-Yoshida 284 (1993) L444
Teillet-Billy, D., see Borisov 284 (1993) 337
Tellioglu, K., see Rechtien 282 (1993) 137
Tellioglu, K., see Harder 287/288 (1993) 16
Terakura, K., see Morikawa 283 (1993) 377
Teraoka, Y., A theoretical study of melting 281 (1993) 317
Teraoka, Y. and T. Seto, Phase transitions in multiple adsorption layer systems 283 (1993) 371
Teraoka, Y. and Y. Tabata, Surface lattice relaxation in chromium 287/288 (1993) 754
Terreni, S., see Canepa 287/288 (1993) 273
Teruyama, S., see Kono 287/288 (1993) 1092
Teyssandier, F., see Maline 286 (1993) 82
Tezuka, Y., see Egawa 283 (1993) 338
Theis, W.M., see Erickson 281 (1993) 220
Thevuthasan, S., see Tran 281 (1993) 270
Thevuthasan, S., see Herman 284 (1993) 23
Thibaudau, F., see Watel 281 (1993) L297
Thibaudau, F., G. Watel and J. Cousty, Scanning tunneling microscopy imaging of alkane bilayers adsorbed on graphite: mechanism of contrast 281 (1993) L303
Thiel, P.A., see Wang 282 (1993) 229
Thiel, P.A., see Flynn-Sanders 289 (1993) 75
Thiel, P.A., see Jensen 290 (1993) L655
Thiry, P.A., see Conard 287/288 (1993) 382
Thomas, R., see Schauer 290 (1993) 277
Thomassen, J., see Wuttig 282 (1993) 237
Thornton, G., see Greenwood 287/288 (1993) 386
Thornton, G., see Purdie 290 (1993) L680
Thowladda, W., see Nielsen 284 (1993) L426
Tikhov, M., see Poulston 287/288 (1993) 969
Tilinin, I.S. and W.S.M. Werner, Angular and energy distribution of Auger and photoelectrons escaping from non-crystalline solid surfaces 290 (1993) 119
Tillborg, H., see Nilsson 287/288 (1993) 758
Timsit, R.S., see Esposto 290 (1993) 93
Timsit, R.S., see Zhang 290 (1993) 103

Tinker, F.A., see Gallagher 281 (1993) L335
Tjandra, S. and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255
Tjeng, L.H., see Idzerda 287/288 (1993) 741
Tochihara, H. and S. Mizuno, Geometries of Li induced structures on Cu(001): LEED and ARUPS studies 287/288 (1993) 423
Todd, B.D. and R.M. Lynden-Bell, Surface and bulk properties of metals modelled with Sutton–Chen potentials 281 (1993) 191
Töglhofer, K., F. Aumayr and HP. Winter, Ion-induced electron emission from metal surfaces – insights from the emission statistics 281 (1993) 143
Tolk, N.H., see Liu 281 (1993) L353
Tolk, N.H., see Xu 289 (1993) L622
Tom, H.W.K., see Fann 283 (1993) 221
Tomagnini, O., F. Ercolessi and E. Tosatti, Microscopic interaction between a gold tip and a Pb(110) surface 287/288 (1993) 1041
Tommasini, F., see Bellman 281 (1993) L321
Tommasini, F., see Bellman 282 (1993) 273
Tommei, G.E., see Ferrando 287/288 (1993) 886
Tong, S.Y., see Li 281 (1993) L347
Tong, S.Y., see Li 282 (1993) 380
Tonscheidt, A., P.L. Ryder, N.I. Jaeger and G. Schulz-Ekloff, Orientation and morphology of iridium, rhodium and platinum nanocrystals in zeolite X 281 (1993) 51
Tornau, E.E., see Lapinskas 287/288 (1993) 50
Torquemada, M.C., see Greenwood 287/288 (1993) 386
Torrini, M., see Bardi 282 (1993) L365
Tosatti, E., see Takeuchi 287/288 (1993) 303
Tosatti, E., see Tomagnini 287/288 (1993) 1041
Tóth, Z., see Solymosi 285 (1993) 197
Tourillon, G., see Cassuto 287/288 (1993) 460
Tran, T.T., S. Thevuthasan, Y.J. Kim, D.J. Friedman, A.P. Kaduwela, G.S. Herman and C.S. Fadley, Photoelectron diffraction and photoelectron holography study of a Ge(111) high-temperature surface phase transition 281 (1993) 270
Tran, T.T., see Herman 284 (1993) 23
Tréglia, G., see Barrett 286 (1993) 150
Tréglia, G., see Senhaji 287/288 (1993) 371
Tréglia, G., see Mottet 287/288 (1993) 476
Tréglia, G., see Khoutami 287/288 (1993) 851
Trenary, M., see Fan 282 (1993) 76
Trenary, M., see Fairbrother 285 (1993) L455
Tringides, M.C., see Wang 282 (1993) 229
Troost, D., H.J. Clemens, L. Koenders and W. Mönch, Electron-stimulated desorption and adsorption sites of chlorine on GaAs(110) surfaces 286 (1993) 97
Truszkowska, K., see Brandt 286 (1993) 15
Tsuei, K.-D., see Shi 290 (1993) 69
Tsukada, M., see Uchiyama 282 (1993) 152
Tsukada, M., see Nakamura 283 (1993) 46
Tsukada, M. and M. Sawamura, Theory of desorption from a negatively biased surface 283 (1993) 182
Tsukada, M., see Kobayashi 285 (1993) 181
Tsukada, M., K. Kobayashi, N. Isshiki, H. Kageshima, T. Uchiyama, S. Watanabe and T. Schimizu, Novel features of surface electronic structure revealed by the theoretical simulation of scanning tunneling microscopy/spectroscopy 287/288 (1993) 1004

Tsukada, M., see Watanabe 287/288 (1993) 1036
Tsunoda, M., see Fukutani 283 (1993) 447
Tu, J., see Zhuang 287/288 (1993) 260
Turner, T.S., see Mikheeva 287/288 (1993) 662
Tüshaus, M., P. Gardner and A.M. Bradshaw, A high resolution vibrational spectroscopic study of CO/K coadsorption on Pt{111} 286 (1993) 212
Tüshaus, M., see Gardner 287/288 (1993) 135
Tyliszczak, T., see Aebi 285 (1993) 275

Uchida, H., D.H. Huang, J. Yoshinobu and M. Aono, Single-atom manipulation on the Si(111)7×7 surface by the scanning tunneling microscope (STM) 287/288 (1993) 1056
Uchida, Y., see Wang 284 (1993) L419
Uchida, Y., see Bao 284 (1993) 14
Uchijima, T., see Kuramochi 287/288 (1993) 217
Uchikoshi, T., Y. Sakka, S. Ohno, H. Okuyama and K. Yoshihara, Adsorption of hydrogen on Ni and Ni–TiO_2 composite ultrafine particles 287/288 (1993) 1082
Uchiyama, A., see Yamazaki 287/288 (1993) 308
Uchiyama, T. and M. Tsukada, Step-induced state of a Si(001) reconstructed surface 282 (1993) 152
Uchiyama, T., see Tsukada 287/288 (1993) 1004
Ueda, K., S. Kodama and A. Takano, Desorption study of a proton from H/Si(100) by electron stimulated desorption spectroscopy 283 (1993) 195
Ueda, K., see Takano 283 (1993) 199
Ueda, K., see Takano 287/288 (1993) 25
Ueda, K. and A. Takano, Hydrogen termination study of silicon dangling bonds by electron stimulated desorption spectroscopy (TOF-ESD) 287/288 (1993) 506
Uehara, Y., see Sekoguchi 283 (1993) 355
Uehara, Y., see Naoi 283 (1993) 457
Uetsuka, H., see Kunimori 283 (1993) 58
Uhrberg, R.I.G., see Landemark 287/288 (1993) 529
Ukisu, Y., see Sato 283 (1993) 137
Ukraintsev, V.A. and I. Harrison, Methane dissociative chemisorption on Pt(111) explored by microscopic reversibility 286 (1993) L571
Umbach, E., see Klekamp 284 (1993) 291
Umeuchi, M., see Nagao 287/288 (1993) 391
Umezawa, K., see Nakanishi 287/288 (1993) 974
Uñac, R., see Zgrablich 290 (1993) 163
Underwood, J., see Capasso 287/288 (1993) 1046
Urano, T., S. Hongo and T. Kanaji, Structure analysis of an alkali metal adsorbed Si(001)(2×1) surface by tensor LEED 287/288 (1993) 294
Urano, T., see Hongo 287/288 (1993) 588
Urbakh, M., see Leiva 287/288 (1993) 681
Urbakh, M. and L. Daikhin, Adsorption isotherm on a fractal surface 287/288 (1993) 847
Urban, K., see Ebert 287/288 (1993) 891
Usami, S., see Ota 287/288 (1993) 99
Usami, S., see Nakayama 287/288 (1993) 355
Ushio, J., see Pápai 282 (1993) 262
Ushioda, S., see Sakai 283 (1993) 217
Ushioda, S., see Sekoguchi 283 (1993) 355
Usui, Y., see Kosugi 287/288 (1993) 862
Uvdal, P., see Xu 289 (1993) L599
Uwaha, M. and Y. Saito, Roughening and smoothing of steps with surface diffusion 283 (1993) 366

Vaksman, M.A. and A. Ben-Reuven, Surface light-induced drift as a tool for studying gas–surface interactions 287/288 (1993) 196
Valbusa, U., see Rocca 287/288 (1993) 770
Valdenazzi, F., see Canepa 287/288 (1993) 273
Valeri, S. and A. di Bona, P LVV Auger lineshape modulation by incident beam diffraction in InP 289 (1993) L617
Van de Kerkhof, G.J.C.S., W. Biemolt, A.P.J. Jansen and R.A. van Santen, Dissociation of ammonia on a copper surface and the effect of oxygen coadsorption: a quantum-chemical study 284 (1993) 361
Van de Kerkhof, G.J.C.S., see Biemolt 287/288 (1993) 183
Van der Veen, J.F., see O'Connor 287/288 (1993) 438
Van Hoof, J.B.A.N., see Crampin 287/288 (1993) 732
Van Hove, M.A., see Starke 286 (1993) 1
Van Hove, M.A., W. Moritz, H. Over, P.J. Rous, A. Wander, A. Barbieri, N. Materer, U. Starke, D. Jentz, J.M. Powers, G. Held and G.A. Somorjai, Fitting dozens of coordinates by LEED: automated determination of complex surface structures 287/288 (1993) 428
Van Hove, M.A., see Starke 287/288 (1993) 432
Van Kempen, H., see Prins 287/288 (1993) 750
Van Kooten, W.E.J., D.D. Kragten, O.L.J. Gijzeman and J.W. Geus, Hydrocarbon interaction with clean and oxidised Cu(111) 290 (1993) 302
Van Loo, F.J.J., see Maline 286 (1993) 82
Van Pinxteren, H.M., see Frenken 283 (1993) 283
Van Santen, R.A., see van de Kerkhof 284 (1993) 361
Van Santen, R.A., see Biemolt 287/288 (1993) 183
Van Slooten, U., E.J.J. Kirchner and A.W. Kleyn, Classical trajectory study of fast H_2 scattering from Ag(111) 283 (1993) 27
Van Slooten, U., see Bot 287/288 (1993) 901
Van Tol, M.F.H., A. Gielbert, R.M. Wolf, A.B.K. Lie and B.E. Nieuwenhuys, The striking difference in the behaviour of Rh and Pt towards their interaction with CO_2 287/288 (1993) 201
Vandoni, G., see Croci 290 (1993) L667
Vanselow, R. and X.Q.D. Li, Roughening transitions in the vicinal areas of Ta{110} and Ta{100} observed during vapour growth on clean, thermally rounded Ta crystallites 281 (1993) L326
Varga, P., see Weigand 287/288 (1993) 350
Varga, P., see Stadler 287/288 (1993) 366
Vedde, J., see Viščor 287/288 (1993) 510
Verbruggen, M.H.W., see O'Mahony 287/288 (1993) 713
Verhoef, R.W., D. Kelly, C.B. Mullins and W.H. Weinberg, Isotope effects for the direct dissociative chemisorption of methane and ethane on Ir(110) and vibrationally assisted chemisorption 287/288 (1993) 94
Vernon, M.F., see Su 282 (1993) 357
Verwoerd, W.S., see Osuch 285 (1993) 59
Verwoerd, W.S., see Badziag 285 (1993) 145
Vescovo, E., see Rader 287/288 (1993) 736
Vidali, G., see Wei Li 287/288 (1993) 336
Vidali, G., see Biham 287/288 (1993) 815
Vidali, G., see Wei Li 287/288 (1993) 955
Vilches, O.E., see Maruyama 283 (1993) 333
Vilfan, I., Unbinding of double steps on vicinal Si(001) surfaces 289 (1993) L604
Villarreal, P., see Hernández 290 (1993) L693
Villette, B., see Barrett 286 (1993) 150

Vincent, D., see Afsin 284 (1993) 109
Vinchon, T., A.M. Oles, D. Spanjaard and M.C. Desjonquères, Are the dimers of the Si(001)(2×1) surface antiferromagnetic? 287/288 (1993) 534
Viščor, P. and J. Vedde, Electrical impedance spectroscopy of silicon surface states 287/288 (1993) 510
Viswanathan, R., see Fairbrother 285 (1993) L455
Vittadini, A., A. Selloni and M. Casarin, Energetics of atomic hydrogen diffusion on Si(100) 289 (1993) L625
Vives, E. and P.-A. Lindgård, Theory and Monte Carlo simulation of adsorbates on corrugated surfaces 284 (1993) L449
Vlieg, E., see Vrijmoeth 290 (1993) 255
Vogel, J., see Soriano 290 (1993) 427
Von Blanckenhagen, P., see Zimmermann 287/288 (1993) 876
Von Känel, H., see Sirringhaus 287/288 (1993) 1019
Vrijmoeth, J., see O'Connor 287/288 (1993) 438
Vrijmoeth, J., P.M. Zagwijn, E. Vlieg, J.W.M. Frenken and P.F.A. Alkemade, Structure determination of the $NiSi_2$(111) surface with medium-energy ion backscattering from individual monolayers 290 (1993) 255

Wada, A., see Domen 283 (1993) 468
Wada, T., T. Nomura, M. Miyao and M. Hagino, A thermal desorption analysis for the adsorption of CO_2 on GaAs photocathodes 285 (1993) 188
Wagner, M., see Mendez 290 (1993) 45
Wakelkamp, W., see Maline 286 (1993) 82
Wallace, J., see Capasso 287/288 (1993) 1046
Walldén, L., see Hamawi 285 (1993) 93
Wandelt, K., see Schneider 287/288 (1993) 146
Wandelt, K., see Zhuang 287/288 (1993) 260
Wandelt, K., see Radnik 287/288 (1993) 330
Wandelt, K., see Schick 287/288 (1993) 960
Wandelt, K., see Schmidt 287/288 (1993) 983
Wander, A., see Barnes 281 (1993) 33
Wander, A., C.J. Barnes, L.D. Mapledoram and D.A. King, Structural transitions in ultra-thin nickel films on Rh{111} 281 (1993) 42
Wander, A., see Hu 286 (1993) L542
Wander, A., see Van Hove 287/288 (1993) 428
Wang, C., see Navarro 287/288 (1993) 622
Wang, Dezheng, see Wu 285 (1993) L522
Wang, G.-C., see Fang 284 (1993) L399
Wang, N., Y. Uchida and G. Lehmpfuhl, REM study of Au(100) reconstructed surfaces 284 (1993) L419
Wang, W.-D., N.J. Wu, P.A. Thiel and M.C. Tringides, Epitaxial growth in a strained system: Ni(100)–O(7×7) 282 (1993) 229
Wang, X.-S., see Bressler-Hill 287/288 (1993) 514
Wang, Y. and W.H. Weinberg, Enhancing the resolution of electron energy loss spectroscopy by digital signal processing techniques 287/288 (1993) 1102
Ward, J.W., see Almeida 287/288 (1993) 141
Ward, T.R., R. Hoffmann and M. Shelef, Coupling nitrosyls as the first step in the reduction of NO on metal surfaces: the special role of rhodium 289 (1993) 85
Warren, J.P., X. Zhang, J.E.T. Andersen and R.M. Lambert, Growth of Ce on Rh, surface alloy formation and the preparation and properties of Rh/ceria model planar catalysts 287/288 (1993) 222
Wartnaby, C.E., see Al-Sarraf 283 (1993) 427

Wassermeier, M., see Bressler-Hill 287/288 (1993) 514
Wassmuth, H.-W., see Ahner 287/288 (1993) 125
Wassmuth, H.-W., see Höfer 287/288 (1993) 130
Wassmuth, H.-W., see Stolz 287/288 (1993) 564
Watanabe, H., see Miki 287/288 (1993) 448
Watanabe, H., see Sugai 287/288 (1993) 455
Watanabe, K. and T. Satoh, Electric field induced surface electronic structures of Si(100) surface 287/288 (1993) 502
Watanabe, S., see Tsukada 287/288 (1993) 1004
Watanabe, S., M. Aono and M. Tsukada, Theoretical calculations of STM images of the Si(111)$\sqrt{3} \times \sqrt{3}$–Ag and –Sb surfaces 287/288 (1993) 1036
Watanabe, T., see Kunimori 283 (1993) 58
Watel, G., F. Thibaudau and J. Cousty, Direct observation of long chain alkane bilayer films on graphite by scanning tunneling microscopy 281 (1993) L297
Watel, G., see Thibaudau 281 (1993) L303
Wedler, H., see Fritzsche 289 (1993) 389
Wee, A.T.S., see Lin 285 (1993) 31
Wei, Xuming, see Wu 285 (1993) L522
Weibel, D.E., T. Hirayama and I. Arakawa, Electron stimulated desorption from the surface of solid Ne: kinetic energy and angular distributions of desorbed metastables 283 (1993) 204
Weigand, P., W. Hofer and P. Varga, Investigation of $Pt_{25}Ni_{75}$(111): preferential sputtering and surface segregation 287/288 (1993) 350
Wei Li and G. Vidali, Metal adatom induced corrugation of Cu(001) 287/288 (1993) 336
Wei Li and G. Vidali, Growth of metastable high-order commensurate overlayers of Pb on Cu(001) 287/288 (1993) 955
Weimert, B., J. Noffke and L. Fritsche, Electronic and magnetic properties of a Co-monolayer on a W(110) substrate 289 (1993) 397
Weinberg, W.H., see Mayne 284 (1993) 247
Weinberg, W.H., see Fichthorn 286 (1993) 139
Weinberg, W.H., see Verhoef 287/288 (1993) 94
Weinberg, W.H., see Bressler-Hill 287/288 (1993) 514
Weinberg, W.H., see Wang 287/288 (1993) 1102
Weinelt, M., P. Zebisch and H.-P. Steinrück, A multimethod-investigation of the adsorption of ethylene oxide on Ni(110) 287/288 (1993) 471
Weiss, K.-U., see Dippel 287/288 (1993) 465
Weitz, E., see Strupp 290 (1993) L699
Wemmenhove, M. and T. Hibma, Structure and coverage of epitaxial Pb-layers on Si(111)(7×7) 287/288 (1993) 925
Wendelken, J.F., see Šiller 287/288 (1993) 165
Wenzien, B., J. Bormet, J. Neugebauer and M. Scheffler, Electronic structure of ($\sqrt{3} \times \sqrt{3}$)R30°-Na and -K on Al(111): comparison of "normal" and substitutional adsorption sites 287/288 (1993) 559
Werdin, St., see Kulakov 287/288 (1993) 241
Werner, W.S.M., see Tilinin 290 (1993) 119
Wertheim, G.K., see Smith 282 (1993) L359
Wetli, E., see Aebi 285 (1993) 275
White, J.M., see Liu 286 (1993) 233
Whitten, J.E., C.E. Young, M.J. Pellin, D.M. Gruen and P.L. Jones, Direct detection of a metal desorption channel: electron-stimulated desorption of aluminum from methanol-dosed Al(111) 282 (1993) 97
Whitten, J.E., see Zhao 286 (1993) 290

Whitten, J.L., see Yang 289 (1993) 30
Whittle, R., see Newstead 287/288 (1993) 317
Whittle, R., E. Dudzik, I.T. McGovern, D.R.T. Zahn, C. Nowak, A. Cafolla and W. Braun, Surface electronic structure of monolayer Bi on InP(110) 287/288 (1993) 554
Wiatrowski, G., see Le Bossé 282 (1993) 389
Wiechers, J., see Magnussen 289 (1993) 139
Wierenga, H.A., see Malliaras 287/288 (1993) 703
Wierenga, H.A., see Spierings 287/288 (1993) 747
Wiesendanger, R., see Tarrach 285 (1993) 1
Wigren, C., J.N. Andersen, R. Nyholm and U.O. Karlsson, Epitaxial silicide formation in the Mg/Si(111) system 289 (1993) 290
Wilby, M.R., see Kawamura 283 (1993) 360
Wilke, S., see Hennig 287/288 (1993) 89
Williams, E.M., see Greenwood 287/288 (1993) 386
Williams, E.M., see Bennett 290 (1993) 267
Williams, P., see Schauer 290 (1993) 277
Williams, R.S., see Eklund 285 (1993) 157
Williams, R.S., see Charatan 289 (1993) 163
Wilsch, H., see Poehlmann 287/288 (1993) 269
Wincott, P.L., see Purdie 290 (1993) L680
Winter, HP., see Töglhofer 281 (1993) 143
Wintterlin, J. and Ph. Avouris, Hydrogen effects in CVD: selective etching and metastable phases 286 (1993) L529
Wöhrmann, U., see Krausch 285 (1993) 81
Woicik, J.C., see Herman 290 (1993) L643
Wolf, R.M., see van Tol 287/288 (1993) 201
Wolter, H., see Schmidt 287/288 (1993) 983
Wong, G.C.L., see Lucas 286 (1993) 46
Woodruff, D.P., Structural studies of adsorbed and coadsorbed molecular species 283 (1993) 309
Woodruff, D.P., see Lloyd 285 (1993) L503
Woodruff, D.P., see Dippel 287/288 (1993) 465
Wouters, E.R., see O'Connor 287/288 (1993) 438
Wu, J., see Zhuang 287/288 (1993) 260
Wu, J.X., see Atrei 290 (1993) 286
Wu, Kai, Dezheng Wang, Xuming Wei, Yuming Cao and Xiexian Guo, An anomalous adsorption curve: Cl on Ag(111) 285 (1993) L522
Wu, N.J., see Wang 282 (1993) 229
Wu, P.K., see Johnson 290 (1993) 213
Wu, Y., see Yu 286 (1993) 116
Wu, Z., see Liu 290 (1993) L685
Wuttig, M. and J. Thomassen, Structure determination for Fe films on Cu(100) 282 (1993) 237
Wynblatt, P., see Liu 290 (1993) 335
Wytenburg, W.J., R.M. Ormerod and R.M. Lambert, Growth and stability of ultra-thin aluminium films on Ag(110) and Ag(111) 282 (1993) 205

Xi, M., see Su 282 (1993) 357
Xie, M.H., see Ohtani 284 (1993) 305
Xu, Han, P. Uvdal, C.M. Friend and J. Stöhr, The adsorption structure of 2, 5-dihydrothiophene on Mo(110)-(4×1)-S: ring orientation as determined by NEXAFS 289 (1993) L599
Xu, J., L. Hudson, R.G. Albridge, A.V. Barnes and N.H. Tolk, Hydrogen exposure-enhanced CN^* emission from alkali-halide surfaces 289 (1993) L622

Xu, P., D. Dunn, J.P. Zhang and L.D. Marks, Atomic imaging of surfaces in plan view — 285 (1993) L479
Xu, W.R., see Saiki — 287/288 (1993) 644
Xu, X. and D.W. Goodman, The preparation and characterization of ultra-thin silicon dioxide films on a Mo(110) surface — 282 (1993) 323
Xu, X., J.-W. He and D.W. Goodman, A surface spectroscopic study of metal–support interactions: model studies of copper on thin SiO_2 films — 284 (1993) 103

Yagi, K., A. Yamanaka and H. Yamaguchi, Surface electromigration of metals on Si surfaces studied by UHV-REM — 283 (1993) 300
Yagi, K., see Yamaguchi — 287/288 (1993) 820
Yagi, K., see Minoda — 287/288 (1993) 915
Yakovkin, I.N., Monte Carlo simulation of order–disorder transitions in linear structures of alkali and alkaline earth adsorbates — 282 (1993) 195
Yamada, M., see Herman — 284 (1993) 23
Yamaguchi, H., see Yagi — 283 (1993) 300
Yamaguchi, H. and K. Yagi, Current effects on Si(111) surfaces at the phase transition between the 7×7 and the 1×1 structures — 287/288 (1993) 820
Yamaguchi, T., see Namba — 283 (1993) 132
Yamaguchi, T., see Anno — 286 (1993) 168
Yamamoto, H., see Domen — 283 (1993) 468
Yamamoto, H., see Baba — 287/288 (1993) 806
Yamamoto, N., see Minoda — 287/288 (1993) 915
Yamamoto, S., see Miyake — 287/288 (1993) 340
Yamamoto, T., see Kishi — 290 (1993) 309
Yamamoto, Y., RHEED–TRAXS study of superstructures induced by Ge and Sn adsorption on a Si(110) surface — 281 (1993) 253
Yamanaka, A., see Yagi — 283 (1993) 300
Yamanaka, T., see Ino — 283 (1993) 319
Yamashita, A., see Ide — 287/288 (1993) 1013
Yamashita, H., see Fukutani — 283 (1993) 447
Yamazaki, H. and A. Uchiyama, Graphite formation on natural diamond (111) surfaces by electron irradiation and heat treatment — 287/288 (1993) 308
Yan, J., see Yu — 286 (1993) 116
Yanagi, H., see Liu — 284 (1993) L411
Yanashima, H., see Aiura — 283 (1993) 344
Yang, A., see Samuelsen — 287/288 (1993) 676
Yang, H. and J.L. Whitten, Reaction of CH_4 with substitutional Fe/Ni(111) — 289 (1993) 30
Yang, H.-N., see Fang — 284 (1993) L399
Yang, L., T.J. Raeker and A.E. DePristo, Surface segregation in bimetallic clusters: predictions using a molecular dynamics/Monte Carlo corrected effective medium theory — 290 (1993) 195
Yang, W.S., see Yu — 286 (1993) 116
Yang, Y.-W., J.C. Lin and T. Engel, Desorption kinetics of CO from epitaxial Pd films on W(110) in the low coverage limit — 289 (1993) 267
Yannick, F., see Matsuo — 283 (1993) 52
Yanokura, E., see Gotoh — 287/288 (1993) 979
Yasue, T., T. Koshikawa, H. Tanaka and I. Sumita, Initial stage of Cu growth on Si(111)7×7 surface studied by scanning tunneling microscopy — 287/288 (1993) 1025
Yates Jr., J.T., see Ramsier — 289 (1993) 39
Yoshihara, K., see Uchikoshi — 287/288 (1993) 1082
Yoshimori, A., Charge and spin dynamics of excited He atom beam on metal surfaces — 283 (1993) 21

Yoshinobu, J., see Uchida 287/288 (1993) 1056
You, H.-X., N.M.D. Brown and K.F. Al-Assadi, Radio-frequency (RF) plasma etching of graphite with oxygen: a scanning tunneling microscope study 284 (1993) 263
Young, C.E., see Whitten 282 (1993) 97
Yu, H., J. Yan, Y. Li, W.S. Yang, Z. Gu and Y. Wu, Scanning tunneling microscopy of C_{60} on graphite 286 (1993) 116
Yuhara, J., see Sasaki 283 (1993) 327

Zaera, F., see Tjandra 289 (1993) 255
Zagwijn, P.M., see O'Connor 287/288 (1993) 438
Zagwijn, P.M., see Vrijmoeth 290 (1993) 255
Zahn, D.R.T., see Whittle 287/288 (1993) 554
Zahn, D.R.T., see Rossow 287/288 (1993) 718
Zanardi, P. and C. Calandra, Charge and energy exchange between a metal and a two-level particle in a metastable state 290 (1993) 141
Zanazzi, E., see Atrei 290 (1993) 286
Zasada, I., see Le Bossé 282 (1993) 389
Zebisch, P., see Weinelt 287/288 (1993) 471
Zegenhagen, J., see Molinàs-Mata 281 (1993) 10
Zehnder, St., see Sirringhaus 287/288 (1993) 1019
Zehner, D.M., see Abernathy 283 (1993) 260
Zehner, D.M., see Sandy 287/288 (1993) 321
Zehner, D.M., see Grübel 287/288 (1993) 842
Zeitler, E., see Rausenberger 287/288 (1993) 235
Zeppenfeld, P., K. Kern, R. David, U. Becher and G. Comsa, Mixtures of Kr and Xe physisorbed on Pt(111): a prototype of a stochastic two-dimensional alloy 285 (1993) L461
Zeppenfeld, P., see Goerge 289 (1993) 201
Zgrablich, G., J.L. Sales, R. Uñac and V.P. Zhdanov, The island model of desorption and Langmuir–Hinshelwood relations 290 (1993) 163
Zhang, C.-S., see Esposto 290 (1993) 93
Zhang, C.-S., F.J. Esposto, B.J. Flinn, P.R. Norton and R.S. Timsit, The influence of Li surface segregation on the initial oxidation of an Al–Li alloy at room temperature 290 (1993) 103
Zhang, J., see Ohtani 284 (1993) 305
Zhang, J., B. Heinrich and K. Colbow, Surface observations of fractal patterns on SnO_2 films 286 (1993) 327
Zhang, J.P., see Xu 285 (1993) L479
Zhang, R., A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1
Zhang, X., see Warren 287/288 (1993) 222
Zhao, Y.B., J.E. Whitten and R. Gomer, Electron stimulated desorption of hydrogen from W(110) 286 (1993) 290
Zhdanov, V.P., see Zgrablich 290 (1993) 163
Zheng, X.M. and P.V. Smith, Hydrogen chemisorption on the Si(111) surface 282 (1993) 173
Zhong, Q., D. Inniss, K. Kjoller and V.B. Elings, Fractured polymer/silica fiber surface studied by tapping mode atomic force microscopy 290 (1993) L688
Zhou, D., see Gallagher 281 (1993) L335
Zhou, J.B., T. Gustafsson, R.F. Lin and E. Garfunkel, Medium energy ion scattering study of Ni on ultrathin films of SiO_2 on Si(111) 284 (1993) 67
Zhou, Ru-Hong, Pei-Lin Cao and Li-Quan Lee, Cluster models study of Ag bonding, migration and interaction on Si(100)-2×1 290 (1993) L649
Zhou, X.-L., see Liu 286 (1993) 233

Zhuang, S., M. Ji, J. Wu, X. Liu, J. Tu and K. Wandelt, The adsorption of chlorine on an $Fe_{64}Ni_{36}$(100) surface 287/288 (1993) 260
Zimmermann, H., M. Nold, U. Romahn, H. Göbel, P. von Blanckenhagen and W. Schommers, Steps, point defects and thermal expansion at the Au(110) surface 287/288 (1993) 876
Zollner, S., see Kelly 285 (1993) 282
Zwartkruis, A. and T. Fondén, Auger rates and spectra for simple models of He^+ in front of a metal surface 290 (1993) 134

Subject index to volumes 281–290

Acetylene

B.I. Craig and P.V. Smith, Erratum to "The structures of small hydrocarbons adsorbed on Si(001) and Si terminated β-SiC(001)" [Surface Science 276 (1992) 174] 285 (1993) 295

Adatoms, see Chemisorption theory

Adhesion

K. Shinjo and M. Hirano, Dynamics of friction: superlubric state 283 (1993) 473

Adsorption isotherms, see also Chemisorption theory, Physisorption

S. Kittaka, T. Sasaki, N. Fukuhara and H. Kato, Fourier transform infrared spectroscopy of H_2O molecules on the Cr_2O_3 surface 282 (1993) 255

H. Asada, S. Doi and H. Kawano, The phase of condensate coexisting with the solid phase of nitrogen on Grafoil, studied by volumetric adsorption measurements of nitrogen 286 (1993) L554

M. Urbakh and L. Daikhin, Adsorption isotherm on a fractal surface 287/288 (1993) 847

T. Kosugi, Y. Usui and I. Arakawa, Adsorption/desorption hysteresis in the adsorption isotherms for Kr and Xe on exfoliated graphite 287/288 (1993) 862

J.A. Prybyla and P.J. Estrup, The effect of surface reconstruction on desorption: H/Mo(100) 290 (1993) 413

Alkali halides

H. Dabringhaus and M. Haag, Desorption transients in the system KBr on KCl(100) 281 (1993) 133

D. Liu, R.G. Albridge, A.V. Barnes, P.H. Bunton, C.S. Ewig, N.H. Tolk and M. Szymonski, The desorption of excited atoms by photon bombardment of alkali halide crystals 281 (1993) L353

C. Pisani, F. Corà, R. Orlando and R. Nada, Ab-initio perturbed-cluster study of carbon monoxide adsorption at a stepped LiF(001) surface 282 (1993) 185

A. Klekamp and E. Umbach, Physisorption on an epitaxial NaCl(100) double-layer: SF_6 and xenon 284 (1993) 291

C.A. Lucas, G.C.L. Wong, C.S. Dower, F.J. Lamelas and P.H. Fuoss, Initial stages in the epitaxial growth of NaCl on Ge(001) 286 (1993) 46

Z.-H. Huang and H. Guo, A novel method for simulating atoms and molecules interacting with ionic surfaces 286 (1993) 182

V. Eteläniemi, E.G. Michel and G. Materlik, RbBr/Si(111) interface studied by the X-ray standing wave method 287/288 (1993) 288

K. Saiki, W.R. Xu and A. Koma, A novel surface excitation in highly ionic fluorides 287/288 (1993) 644

J. Xu, L. Hudson, R.G. Albridge, A.V. Barnes and N.H. Tolk, Hydrogen exposure-enhanced CN^* emission from alkali-halide surfaces 289 (1993) L622

R. Souda, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy D^+ scattering from Cs and CsCl adsorbed on the Si(100)2×1 surface 290 (1993) 245

Alkali metals

E. Lundgren, J.N. Andersen, M. Qvarford and R. Nyholm, Layer dependent core level binding energy shifts: Na, K, Rb and Cs on Al(111) 281 (1993) 83

Alkali metals (continued)

T. Hansson and L. Holmlid, Large hysteresis effect in surface ionization of Cs due to bulk diffusion 281 (1993) 309

N.V. Smith, G.K. Wertheim, A.B. Andrews and C.T. Chen, Inelastic electron mean free paths in the alkali metals: effect of the empty d bands 282 (1993) L359

I.N. Yakovkin, Monte Carlo simulation of order–disorder transitions in linear structures of alkali and alkaline earth adsorbates 282 (1993) 195

A. Namiki, S. Suzuki, H. Kato, T. Nakamura and T. Suzaki, Dynamical study of alkali promotion of NO sticking on Si(100) 283 (1993) 9

R. Souda, W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Chemical effects on dynamical charge transfer: D^+ on K-adsorbed Pt(111), Si(100) and Si(111) surfaces 283 (1993) 36

M. Nishijima, M. Fujisawa, T. Takaoka and T. Sekitani, The reaction of benzene with Pd(110) and Pd(110)(1×2)–Cs surfaces 283 (1993) 121

J. Sakai, G. Mizutani and S. Ushioda, Bonding of O_2, CO_2, and CO on a Cs/p-GaAs(100) surface and its relation to negative electron affinity 283 (1993) 217

Y. Morikawa, K. Kobayashi and K. Terakura, First-principles molecular dynamics study of alkali-metal adsorption on a Si(001) surface 283 (1993) 377

N. Al-Sarraf, J.T. Stuckless, C.E. Wartnaby and D.A. King, Adsorption microcalorimetry and sticking probabilities on metal single crystal surfaces 283 (1993) 427

Y. Naoi, K. Ito, Y. Uehara and Y. Murata, Very high resolution photoelectron spectra of NEA-GaAs 283 (1993) 457

T.M. Grehk, C.U.S. Larsson, N.P. Prince and S.A. Flodström, Adsorption of lithium on the Si(111)7×7 surface studied with high resolution core-level spectroscopy 284 (1993) L384

H.B. Nielsen and W. Thowladda, Position and linewidth of the K-induced 4s resonance on Ag(100): a two-photon photo-emission study 284 (1993) L426

H. Müller, R. Hausmann, H. Brenten and V. Kempter, Electrons from intra- and interatomic Auger processes in low-energy grazing collisions of H^+ and H_2^+ with W(110) partially covered by alkali atoms 284 (1993) 129

A. Cassuto, S. Schmidt and Mane Mane, The interaction of potassium submonolayers adsorbed on Pt(111) with oxygen and the adsorption of ethylene on the resulting modified surfaces: a TDS and UPS study 284 (1993) 273

A.G. Borisov, D. Teillet-Billy and J.P. Gauyacq, Singlet-to-triplet conversion in low energy metastable helium–metal surface collisions 284 (1993) 337

K.M. Hock and R.E. Palmer, Temperature dependent behaviour in the adsorption of submonolayer potassium on graphite 284 (1993) 349

J.M. Lopez Sancho, M.C. Refolio, M.P. Lopez Sancho and J. Rubio, Extended Hubbard model analysis of semiconductor–alkali interfaces: implications for the metallization problem 285 (1993) L491

A. Hamawi and L. Walldén, Quantum size effect for Na films on Si(100) 285 (1993) 93

N. Memmel, G. Rangelov and E. Bertel, Influence of the substrate on the band structure of alkali metal monolayers 285 (1993) 109

T. Wada, T. Nomura, M. Miyao and M. Hagino, A thermal desorption analysis for the adsorption of CO_2 on GaAs photocathodes 285 (1993) 188

F. Solymosi, A. Berkó and Z. Tóth, Adsorption and dissociation of CH_3OH on clean and K-promoted Pd(100) surfaces 285 (1993) 197

R. Souda, W. Hayami, T. Aizawa and Y. Ishizawa, Low energy D^+ scattering from clean and alkalated TiO_2(110) surfaces 285 (1993) 265

S. Ferrer, Phase information in the crystal truncation rods 286 (1993) L564

A. Görling, L. Ackermann, J. Lauber, P. Knappe and N. Rösch, On the coadsorption of CO and alkali atoms at transition metal surfaces: a LCGTO-LDF cluster study 286 (1993) 26

Alkali metals (continued)

M. Tüshaus, P. Gardner and A.M. Bradshaw, A high resolution vibrational spectroscopic study of CO/K coadsorption on Pt{111} 286 (1993) 212
G. Pacchioni and P.S. Bagus, Alkali adsorbates on metal surfaces: observable consequences of the ionic K/Cu(100) interaction 286 (1993) 317
M. Höfer, H. Stolz and H.-W. Wassmuth, Coadsorption of SO_2 and Cs on Ag(100) 287/288 (1993) 130
J.C. Barnard, K.M. Hock and R.E. Palmer, Intercalation of potassium from the surface of graphite 287/288 (1993) 178
D.V. Chakarov, P. Sjövall and B. Kasemo, Vibrational spectra of KO_x complexes on graphite 287/288 (1993) 278
T. Urano, S. Hongo and T. Kanaji, Structure analysis of an alkali metal adsorbed Si(001)(2×1) surface by tensor LEED 287/288 (1993) 294
C. Stampfl, J. Burchhardt, M. Nielsen, D.L. Adams, M. Scheffler, H. Over and W. Moritz, The structure of Al(111)–K-($\sqrt{3}\times\sqrt{3}$)R30° determined by LEED: stable and metastable adsorption sites 287/288 (1993) 418
H. Tochihara and S. Mizuno, Geometries of Li induced structures on Cu(001): LEED and ARUPS studies 287/288 (1993) 423
L.S.O. Johansson and B. Reihl, Alkali metals on Si(100)2×1: comparative study of the surface electronic structures for Li, Na and K adsorption 287/288 (1993) 524
B. Wenzien, J. Bormet, J. Neugebauer and M. Scheffler, Electronic structure of ($\sqrt{3}\times\sqrt{3}$)R30°-Na and -K on Al(111): comparison of "normal" and substitutional adsorption sites 287/288 (1993) 559
H. Stolz, M. Höfer and H.-W. Wassmuth, TPD, AES, $\Delta\phi$ and LEED investigations of cesium adsorbed on Ag(100) 287/288 (1993) 564
J. Neugebauer and M. Scheffler, Theory of adsorption and desorption in high electric fields 287/288 (1993) 572
O. Pankratov and M. Scheffler, Electron correlations on a potassium-covered GaAs(110) surface: ab-initio calculations of the Hubbard correlation energy 287/288 (1993) 584
S. Hongo, S. Saito, T. Urano and T. Kanaji, Singlet–triplet conversion efficiency of metastable He atoms dependent upon structures of adsorbed alkali metals on Si(100)2×1 287/288 (1993) 588
W. Kuch, M. Schulze, W. Schnurnberger and K. Bolwin, XPS lineshape analysis of potassium coadsorbed with water on Ni(111) 287/288 (1993) 600
R. Dudde and B. Reihl, Electronic structure of alkali-metal monolayers on Cu(111) 287/288 (1993) 614
L. Spiess, P.S. Mangat, S.-P. Tang, K.M. Schirm, A.J. Freeman and P. Soukiassian, Combined theoretical and experimental determination of the atomic structure and adsorption site of Na on the Si(100)2×1 surface 289 (1993) L631
J.N. Andersen, E. Lundgren, R. Nyholm and M. Qvarford, Alkali metal adsorption on Al(111) 289 (1993) 307
V. Fritzsche, J.B. Pendry, U. Löffler, H. Wedler, M.A. Mendez and K. Heinz, Surface dipole moments from LEED investigations 289 (1993) 389
D. Purdie, C.A. Muryn, S. Crook, P.L. Wincott, G. Thornton and D.A. Fischer, Potassium bond site in ZnO(000$\bar{1}$)p(2×2)K 290 (1993) L680
P. Sjövall and B. Kasemo, A TDS study of oxygen, water and carbon dioxide coadsorption with potassium on graphite 290 (1993) 55
X. Shi, D. Tang, D. Heskett, K.-D. Tsuei, H. Ishida and Y. Morikawa, Coverage-dependent core level photoemission investigations of Na/Cu(111) and Na/Ni(111) 290 (1993) 69
M.A. Karolewski and R.G. Cavell, Characterization by SIMS of Brønsted acid chemisorption on MgO(100) and Cs/MgO(100) 290 (1993) 80
C.A. Ordonez, D.P. Russell and M. Portillo, F center random walk diffusion after electron irradiation of alkali halides 290 (1993) 113

Alkali metals (continued)
R. Souda, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy D^+ scattering from Cs and CsCl adsorbed on the Si(100)2×1 surface 290 (1993) 245
K. Kishi, K. Hirai and T. Yamamoto, XPS and XAES study for oxidation of V/Cu(100) and V, Na/Cu(100) surfaces 290 (1993) 309

Alkanes
G. Watel, F. Thibaudau and J. Cousty, Direct observation of long chain alkane bilayer films on graphite by scanning tunneling microscopy 281 (1993) L297
F. Thibaudau, G. Watel and J. Cousty, Scanning tunneling microscopy imaging of alkane bilayers adsorbed on graphite: mechanism of contrast 281 (1993) L303
J.-P. Bucher, H. Roeder and K. Kern, Thermally induced disorder and conformational defects of alkane monolayers on graphite 289 (1993) 370

Alloys
J.M. Bugnard, R. Baudoing-Savois, Y. Gauthier and E.K. Hill, The (110) surface of the disordered $Pt_{25}Co_{75}$ alloy: a sandwich of almost pure monoatomic layers 281 (1993) 62
J.C. Bertolini, J.L. Rousset, P. Miegge, J. Massardier, B. Tardy, Y. Samson, B.C. Khanra and C. Creemers, Surface segregation study of a dilute Pd_1Fe_{99} alloy by LEIS and XPS 281 (1993) 102
M.R. Davidson, G.B. Hoflund and R.A. Outlaw, Electron stimulated desorption of oxygen atoms and ions from an oxidized Ag–Zr alloy surface 281 (1993) 111
U. Bardi, A. Atrei, B. Cortigiani, G. Rovida and M. Torrini, X-ray photoelectron diffraction study of an oxidized Pt–Co(001) alloy surface: evidence for atomic scale rippling of the CoO overlayer 282 (1993) L365
Y. Huang and J.M. Cowley, A study of the Cu_3Au(110) surface structure by RHEED 285 (1993) 42
R. Najafabadi and D.J. Srolovitz, Order–disorder transitions at and segregation to (001) Ni–Pt surfaces 286 (1993) 104
A. Atli, M. Abon and J.C. Bertolini, Carbon monoxide adsorption on the (111) and (110) faces of a $Pt_{50}Ni_{50}$ single-crystal alloy 287/288 (1993) 110
U. Schneider, G.R. Castro and K. Wandelt, Adsorption on ordered Cu_3Pt(111): site selectivity 287/288 (1993) 146
S. Zhuang, M. Ji, J. Wu, X. Liu, J. Tu and K. Wandelt, The adsorption of chlorine on an $Fe_{64}Ni_{36}$(100) surface 287/288 (1993) 260
J.C. Bertolini, J.L. Rousset, P. Miegge, J. Massardier and B. Tardy, On the large Pd surface segregation and reactivity of Pd_1Fe_{99} and Pd_5Fe_{95} dilute alloys 287/288 (1993) 346
P. Weigand, W. Hofer and P. Varga, Investigation of $Pt_{25}Ni_{75}$(111): preferential sputtering and surface segregation 287/288 (1993) 350
H. Stadler, W. Hofer, M. Schmid and P. Varga, Embedded-atom method calculations applied to surface segregation of Pt–Ni single crystals 287/288 (1993) 366
A. Senhaji, G. Tréglia, J. Eugène, A. Khoutami and B. Legrand, Alloy surfaces and surface alloys: from equilibrium to kinetics 287/288 (1993) 371
S. Löbus, M. Lau, R. Courths and S. Halilov, The Tamm surface state on ordered Cu_3Au(001) 287/288 (1993) 568
G.G. Kleiman, R. Landers, S.G.C. de Castro and P.A.P. Nascente, Core-level Auger energy shifts in palladium alloys 287/288 (1993) 794
A. Khoutami, B. Legrand and G. Tréglia, On a surprising anisotropy of surface segregation in CuPt alloys 287/288 (1993) 851
J. du Plessis, Sequential surface segregation kinetics of the ternary system Fe–Si–S 287/288 (1993) 857
T.I.M. Bootsma and T. Hibma, A strain-relieve transition in epitaxial growth of metals on Si(111)(7×7) 287/288 (1993) 921

Alloys (continued)
J.M. Montejano-Carrizales and J.L. Morán-López, Oxygen chemisorption effects on the spatial atomic distribution of CuNi, CuPd and NiPt nanostructures 287/288 (1993) 1070
J.A. Rodriguez, The chemical properties of bimetallic surfaces: bonding between CO and Zn on Ru(001) 289 (1993) L584
H. Niehus and C. Achete, Surface structure investigation of nitrogen and oxygen on $Cu_3Au(100)$ 289 (1993) 19
H. Yang and J.L. Whitten, Reaction of CH_4 with substitutional Fe/Ni(111) 289 (1993) 30
Y. Huang and J.M. Cowley, Structure of the sulfur-adsorbed $Cu_3Au(110)$ surface 289 (1993) 340
I.G. Batirev, A.N. Karavanov and J.A. Leiro, Surface segregation and catalytic properties of Pd–Ru alloys 289 (1993) 357
F.J. Esposto, C.-S. Zhang, P.R. Norton and R.S. Timsit, Segregation studies of an Al–Li alloy 290 (1993) 93
C.-S. Zhang, F.J. Esposto, B.J. Flinn, P.R. Norton and R.S. Timsit, The influence of Li surface segregation on the initial oxidation of an Al–Li alloy at room temperature 290 (1993) 103
L. Yang, T.J. Raeker and A.E. DePristo, Surface segregation in bimetallic clusters: predictions using a molecular dynamics/Monte Carlo corrected effective medium theory 290 (1993) 195
M. Taniguchi, E.K. Kuzembaev and K. Tanaka, A mimic model of Pt–Rh catalyst prepared by electrochemical deposition of Rh on the Pt(100) surface 290 (1993) L711
Y. Liu and P. Wynblatt, Study of a surface critical phenomenon associated with surface segregation in Cu–Ag alloys 290 (1993) 335
Cs. Cserháti, H. Bakker and D.L. Beke, Kinetics of surface segregation in alloys 290 (1993) 345

Alumina, see Aluminium oxide

Aluminium
E. Lundgren, J.N. Andersen, M. Qvarford and R. Nyholm, Layer dependent core level binding energy shifts: Na, K, Rb and Cs on Al(111) 281 (1993) 83
J.E. Whitten, C.E. Young, M.J. Pellin, D.M. Gruen and P.L. Jones, Direct detection of a metal desorption channel: electron-stimulated desorption of aluminum from methanol-dosed Al(111) 282 (1993) 97
W.J. Wytenburg, R.M. Ormerod and R.M. Lambert, Growth and stability of ultra-thin aluminium films on Ag(110) and Ag(111) 282 (1993) 205
M. Okada and Y. Murata, Scattering of very-low-energy D_2^+ ions from an Al(111) surface: neutralization and dissociation 283 (1993) 41
S.C. Park, C.H. Cho and C.H. Rhee, Theoretical studies of polyatomic reactions on metal surfaces: Al + $SiCl_4$ and Cu + $SiCl_4$ model systems 283 (1993) 70
H. Onishi, T. Aruga and Y. Iwasawa, An unusual adsorption state of hydrogen on the Pd(100)-p(2×2)-p4g-Al bimetallic surface 283 (1993) 213
D.P. Woodruff, Structural studies of adsorbed and coadsorbed molecular species 283 (1993) 309
S. Nakada, Y. Narahara and K. Kono, Interaction between third sound and surface irregularities 283 (1993) 414
S.A. Larson and L.L. Lauderback, Oxidation kinetics of the top atomic layer of Al(100) from angle resolved SIMS 284 (1993) 1
M. Heinrichsmeier, A. Fleszar and A.G. Eguiluz, LDA calculation of the surface states on the (001), (110), and (111) surfaces of aluminum 285 (1993) 129
B.J. Hinch, R.B. Doak and L.H. Dubois, Surface topography changes induced by chemical vapor deposition of aluminum on Al(111) 286 (1993) 261
M. Okada and Y. Murata, Sputtering of Al surface with very-low-energy ions 287/288 (1993) 21

Aluminium (continued)
H. Kondoh, M. Hara, K. Domen and H. Nozoye, Adsorption of hydrogen on Al(111) and Al(110): coverage and temperature dependence of adsorption states 287/288 (1993) 74
C. Stampfl, J. Burchhardt, M. Nielsen, D.L. Adams, M. Scheffler, H. Over and W. Moritz, The structure of Al(111)–K-($\sqrt{3} \times \sqrt{3}$)R30° determined by LEED: stable and metastable adsorption sites 287/288 (1993) 418
D.J. O'Connor, E.R. Wouters, A.W. Denier van der Gon, J. Vrijmoeth, P.M. Zagwijn, W.F.J. Slijkerman, J.W.M. Frenken and J.F. van der Veen, Oxidation of Al(111) 287/288 (1993) 438
M. Seelmann-Eggebert, G.P. Carey, R. Klauser and H.J. Richter, A case study for XPD in the presence of a compositional depth profile: interface formation between metals (Ag, Al) and HgCdTe 287/288 (1993) 495
B. Wenzien, J. Bormet, J. Neugebauer and M. Scheffler, Electronic structure of ($\sqrt{3} \times \sqrt{3}$)R30°-Na and -K on Al(111): comparison of "normal" and substitutional adsorption sites 287/288 (1993) 559
J. Neugebauer and M. Scheffler, Theory of adsorption and desorption in high electric fields 287/288 (1993) 572
L.S. Dake and R.J. Lad, Electronic and chemical interactions at aluminum/TiO_2(110) interfaces 289 (1993) 297
J.N. Andersen, E. Lundgren, R. Nyholm and M. Qvarford, Alkali metal adsorption on Al(111) 289 (1993) 307
S. Imaduddin and R.J. Lad, Aluminum deposition on NiO(100): growth, structure and composition of the interface 290 (1993) 35
Y. Okuno, M. Kuwahara, M. Fukui and Y. Shintani, The effects of residual gases on optical constants of Al films 290 (1993) 421

Aluminium oxide
B. Ealet and E. Gillet, Palladium alumina interface: influence of the oxide stoichiometry studied by EELS and XPS 281 (1993) 91
T. Hansson and L. Holmlid, Velocity distribution of Cs atoms emitted from a hot graphite-covered Ir surface after diffusion through the Ir bulk 282 (1993) L370
M.A. Schildbach and A.V. Hamza, Clean and water-covered sapphire ($1\bar{1}02$) surfaces: structure and laser-induced desorption 282 (1993) 306
I. Manassidis, A. De Vita and M.J. Gillan, Structure of the (0001) surface of α-Al_2O_3 from first principles calculations 285 (1993) L517
M. Lindblad and T.A. Pakkanen, Cluster models for the interaction of HCl with non-polar surfaces of γ-Al_2O_3 286 (1993) 333
T.N. Rhodin, B.G. Frederick and G. Apai, Electronic, vibrational and chemical properties of alumina surfaces 287/288 (1993) 638
G. Moretti and P. Porta, Application of the Auger parameter in the characterization of small copper particles supported on insulators 287/288 (1993) 1076

Ammonia
J. Fan and M. Trenary, The influence of coadsorbates on the overlayer structure of PF_3 on Pt(111) 282 (1993) 76
B. Afsin, P.R. Davies, A. Pashusky, M.W. Roberts and D. Vincent, Reaction pathways in the oxydehydrogenation of ammonia at Cu(110) surfaces 284 (1993) 109
G.J.C.S. van de Kerkhof, W. Biemolt, A.P.J. Jansen and R.A. van Santen, Dissociation of ammonia on a copper surface and the effect of oxygen coadsorption: a quantum-chemical study 284 (1993) 361
W. Biemolt, A.P.J. Jansen, M. Neurock, G.J.C.S. van de Kerkhof and R.A. van Santen, The oxidation of ammonia by copper 287/288 (1993) 183

Ammonia (continued)
H.E. Dastoor, P. Gardner and D.A. King, The coadsorption of ammonia and oxygen on Ni{110}: a RAIRS study 289 (1993) 279
S.X. Huang, T.S. Rufael and J.L. Gland, Diimide formation on the Ni(100) surface 290 (1993) L673

Arsenic
T.H. Shen and C.C. Matthai, Calculation of the optical properties of As molecules on Si substrates 287/288 (1993) 672
U. Rossow, U. Frotscher, W. Richter and D.R.T. Zahn, In situ optical characterisation with monolayer sensitivity: the As-terminated Si(111) surface 287/288 (1993) 718

Atom–surface interaction potential, see Surface phonons and adsorbate vibrations

Atomic and molecular beam studies
A.F. Bellman, D. Cvetko, A. Morgante, M. Polli, F. Tommasini, K.C. Prince and R. Rosei, The (2×2) p2mg to (1×2) O/Rh(110) phase transition 281 (1993) L321
H. Dabringhaus and M. Haag, Desorption transients in the system KBr on KCl(100) 281 (1993) 133
R.J. Smith, A. Kara and S. Holloway, A molecular dynamics study for the trapping and scattering of Ar/Pt(111) 281 (1993) 296
J.-H. Rechtien, R. Harder, G. Herrmann, A. Nesbitt, K. Tellioglu and K.J. Snowdon, Direct measurement of the energy release and final molecular axis orientation in dissociative molecular scattering at surfaces 282 (1993) 137
A.F. Bellman, D. Cvetko, A. Morgante, M. Polli, F. Tommasini, V.R. Dhanak, A. Lausi, K.C. Prince, R. Rosei, P. Cortona and M.G. Dondi, He scattering from Rh(110) 282 (1993) 273
C. Su, M. Xi, Z.-G. Dai, M.F. Vernon and B.E. Bent, Dry etching of GaAs with Cl_2: correlation between the surface Cl coverage and the etching rate at steady state 282 (1993) 357
D.J. Auerbach, C.T. Rettner and H.A. Michelsen, Interaction dynamics of hydrogen at a Cu(111) surface 283 (1993) 1
A. Namiki, S. Suzuki, H. Kato, T. Nakamura and T. Suzaki, Dynamical study of alkali promotion of NO sticking on Si(100) 283 (1993) 9
U. van Slooten, E.J.J. Kirchner and A.W. Kleyn, Classical trajectory study of fast H_2 scattering from Ag(111) 283 (1993) 27
J. Matsuo, F. Yannick and K. Karahashi, Reaction kinetics of chlorine on Si(111)7×7 surfaces 283 (1993) 52
K. Sugiyama, Y. Igari and I. Kusunoki, A molecular beam study of desorption kinetics of GeO from Ge(111) surfaces 283 (1993) 64
P. Zeppenfeld, K. Kern, R. David, U. Becher and G. Comsa, Mixtures of Kr and Xe physisorbed on Pt(111): a prototype of a stochastic two-dimensional alloy 285 (1993) L461
B.J. Hinch, R.B. Doak and L.H. Dubois, Surface topography changes induced by chemical vapor deposition of aluminum on Al(111) 286 (1993) 261
D.M. Halstead and A.E. DePristo, Thin film growth and the scattering of atoms from surface island defects 286 (1993) 275
R. Harder, K. Tellioglu, A. Nesbitt, G. Herrmann, A. Golichowski and K.J. Snowdon, Role of projectile-motion-induced electronic transitions in the dissociation of fast H_2 at a Cu(111) surface 287/288 (1993) 16
K. Bärwinkel and L. Rottmann, A model for irreversible scattering of gas atoms on a metal surface 287/288 (1993) 35

Atomic and molecular beam studies (continued)
R.W. Verhoef, D. Kelly, C.B. Mullins and W.H. Weinberg, Isotope effects for the direct dissociative chemisorption of methane and ethane on Ir(110) and vibrationally assisted chemisorption 287/288 (1993) 94
T. Matsushima, Y. Ohno and J.-I. Murakami, Spatial and velocity distributions of desorbing product carbon dioxide over a reconstructed platinum (110)(1×2) surface 287/288 (1993) 192
E. Poehlmann, M. Schmitt, H. Hoinkes and H. Wilsch, Velocity distributions of carbondioxide molecules from the oxidation of CO on Pt(111) 287/288 (1993) 269
M. Canepa, P. Cantini, L. Mattera, M. Salvietti, S. Terreni and F. Valdenazzi, Water dissociation on O(n×1)–Ag(110) phases 287/288 (1993) 273
Wei Li and G. Vidali, Metal adatom induced corrugation of Cu(001) 287/288 (1993) 336
T. Miyake and S. Yamamoto, Diffractive scattering of a helium molecular beam from monatomic layers on a W(110) surface 287/288 (1993) 340
E. Hulpke and J. Lüdecke, The giant surface phonon anomaly on hydrogen saturated W(110) and Mo(110) 287/288 (1993) 837
G. Bracco, C. Malò, C.J. Moses and R. Tatarek, On the primary mechanism of surface roughening: the Ag(110) case 287/288 (1993) 871
L. Barbier, B. Salanon, J. Sprösser and J. Lapujoulade, Growth and ordering dynamics for Au deposition on Au(110)(2×1) 287/288 (1993) 930
Wei Li and G. Vidali, Growth of metastable high-order commensurate overlayers of Pb on Cu(001) 287/288 (1993) 955
G. Gross and K.H. Rieder, Revisiting the iterative procedure for atomic beam diffraction analyses: improvements, caveats and first application to a 2D adsorption structure 289 (1993) 180
P.G. Bolcatto and E.C. Goldberg, Scattering of atoms by surfaces within a molecular orbital approach 289 (1993) 187
J. Goerge, P. Zeppenfeld, R. David, M. Büchel and G. Comsa, Structure of the hydrogen covered Cu(110) surface studied with thermal energy helium scattering 289 (1993) 201
Y.-W. Yang, J.C. Lin and T. Engel, Desorption kinetics of CO from epitaxial Pd films on W(110) in the low coverage limit 289 (1993) 267
A. Gross and W. Brenig, Vibrational excitation of NO in NO/Ag scattering revisited 289 (1993) 335
M. Croci, C. Félix, G. Vandoni, W. Harbich and R. Monot, Measurement of macroscopic diffusion of CO on Pt(111) by thermal helium scattering 290 (1993) L667
M. Hernández, S. Miret-Artés, P. Villarreal and G. Delgado-Barrio, Selective adsorption resonances at rainbow conditions in the scattering of atoms by stepped surfaces: application to the ^{4}He/Cu(117) system 290 (1993) L693

Atomic force microscopy
B.J. Cruickshank, D.D. Sneddon and A.A. Gewirth, In situ observations of oxygen adsorption on a Cu(100) substrate using atomic force microscopy 281 (1993) L308
L. Scandella, N. Kruse and R. Prins, Imaging of zeolite surface structures by atomic force microscopy 281 (1993) L331
M.J. Gallagher, D. Chen, B.P. Jacobsen, D. Sarid, L.D. Lamb, F.A. Tinker, J. Jiao, D.R. Huffman, S. Seraphin and D. Zhou, Characterization of carbon nanotubes by scanning probe microscopy 281 (1993) L335
T.G. Sharp, P.I. Oden and P.R. Buseck, Lattice-scale imaging of mica and clay (001) surfaces by atomic force microscopy using net attractive forces 284 (1993) L405
R. Lüthi, H. Haefke, P. Grütter, H.-J. Güntherodt, L. Szcześniak and K.P. Meyer, Surface and domain structures of ferroelectric GASH crystals studied by scanning force microscopy 285 (1993) L498

Atomic force microscopy (continued)
H. Shindo and H. Nozoye, Atomic force microscopic study of structures of cleaved surfaces of $CaSO_4$ after wet chemical etching 287/288 (1993) 1030
O. Tomagnini, F. Ercolessi and E. Tosatti, Microscopic interaction between a gold tip and a Pb(110) surface 287/288 (1993) 1041
A. Schumacher, L. Scandella, N. Kruse and R. Prins, Single-layer MoS_2 on mica: studies by means of scanning force microscopy 289 (1993) L595
H.-G. Busmann, R. Hiss, H. Gaber and I.V. Hertel, Growth mechanisms of C_{60}-molecular beam epitaxy on mica 289 (1993) 381
Q. Zhong, D. Inniss, K. Kjoller and V.B. Elings, Fractured polymer/silica fiber surface studied by tapping mode atomic force microscopy 290 (1993) L688
S. Imaduddin and R.J. Lad, Aluminum deposition on NiO(100): growth, structure and composition of the interface 290 (1993) 35

Auger ejection, see Auger electron spectroscopy

Auger electron spectroscopy
M. Shinn, P.B. Mirkarimi and S.A. Barnett, Nucleation of lattice-mismatched transition-metal nitride films: limitations on superlattice growth 281 (1993) 1
M.R. Davidson, G.B. Hoflund and R.A. Outlaw, Electron stimulated desorption of oxygen atoms and ions from an oxidized Ag–Zr alloy surface 281 (1993) 111
A. Sellidj and B.E. Koel, Growth mechanism and structure of ultrathin Pd films vapor-deposited on Ta(110) 281 (1993) 223
S. Surnev, Interaction of oxygen with a Ge-covered Si(100) surface 282 (1993) 10
S. Sugai, K. Takeuchi, T. Ban, H. Miki, K. Kawasaki and T. Kioka, Adsorption and dissociation of NO on Pt(100) and (310) studied by AES, UPS and XPS 282 (1993) 67
D. Marton, K.J. Boyd, T.E. Lytle and J.W. Rabalais, Auger electron spectroscopy of krypton subplanted in graphite 282 (1993) 113
W.J. Wytenburg, R.M. Ormerod and R.M. Lambert, Growth and stability of ultra-thin aluminium films on Ag(110) and Ag(111) 282 (1993) 205
X. Xu and D.W. Goodman, The preparation and characterization of ultra-thin silicon dioxide films on a Mo(110) surface 282 (1993) 323
A. Mesarwi and A. Ignatiev, Interaction of Y overlayers with the GaAs(100) surface and oxidation of the Y/GaAs interface 282 (1993) 371
K.H. Park, B.C. Kim and H. Kang, Kinetic energy dependence of N^+ and N_2^+ reactions with Si(100) 283 (1993) 73
M. Sasaki, J. Yuhara, M. Inoue and K. Morita, Studies on 2D Au–Cu binary adsorbates on Si(111) surfaces by means of combined LEED/AES/RBS techniques 283 (1993) 327
C. Egawa, Y. Tezuka, S. Oki and Y. Murata, Structures of ultra-thin Fe overlayers on a Rh(001) surface 283 (1993) 338
Y.U. Idzerda and G.A. Prinz, Auger intensity mapping of monolayers of Ni/Cu(001) 284 (1993) L394
H. Itoh, S. Narui, H. Tanabe and T. Ichinokawa, Nucleation and surface reconstruction of Pd on Si(100) observed by scanning tunneling microscopy 284 (1993) 236
J.C.S. Chu, Y. Bu and M.C. Lin, Spectroscopy and reactions of hydrazoic acid on silicon single crystal surfaces. III. HN_3 and DN_3 on Si(111)(7×7) 284 (1993) 281
H. den Daas, O.L.J. Gijzeman and J.W. Geus, Oxidation of ultrathin iron layers on Cu(100). Composition of the oxide films 285 (1993) 15
Y. Huang and J.M. Cowley, A study of the $Cu_3Au(110)$ surface structure by RHEED 285 (1993) 42
J.K.N. Sharma, B.R. Chakraborty and S. Bera, Study of oxidation and silicidation of Ta by electron impact autoionization process 285 (1993) 237

Auger electron spectroscopy (continued)
M. Maline, M. Ducarroir, F. Teyssandier, R. Hillel, R. Berjoan, F.J.J. Van Loo and W. Wakelkamp, Auger electron spectroscopy of compounds in the Si–Ti–C system. Characterization of Si–Ti–C multiphased materials obtained by CVD 286 (1993) 82
D. Troost, H.J. Clemens, L. Koenders and W. Mönch, Electron-stimulated desorption and adsorption sites of chlorine on GaAs(110) surfaces 286 (1993) 97
J. Zhang, B. Heinrich and K. Colbow, Surface observations of fractal patterns on SnO_2 films 286 (1993) 327
M. Krawczyk and W. Palczewska, A surface study on model Pd(111) catalyst modified with boron 287/288 (1993) 212
J.P. Warren, X. Zhang, J.E.T. Andersen and R.M. Lambert, Growth of Ce on Rh, surface alloy formation and the preparation and properties of Rh/ceria model planar catalysts 287/288 (1993) 222
S. Zhuang, M. Ji, J. Wu, X. Liu, J. Tu and K. Wandelt, The adsorption of chlorine on an $Fe_{64}Ni_{36}(100)$ surface 287/288 (1993) 260
S. Sugai, K. Shimizu, H. Watanabe, H. Miki, K. Kawasaki and T. Kioka, Chemisorption of NO on Pt(210) studied by UPS, XPS and AES 287/288 (1993) 455
M.O. Schweitzer, T.S. Jones, C.F. McConville and N.V. Richardson, The deposition of a thin Au film on InSb(100) 287/288 (1993) 545
H. Stolz, M. Höfer and H.-W. Wassmuth, TPD, AES, $\Delta\phi$ and LEED investigations of cesium adsorbed on Ag(100) 287/288 (1993) 564
O. Rader, C. Carbone, W. Clemens, E. Vescovo, S. Blügel, W. Eberhardt and W. Gudat, Growth and magnetic behavior of Pd on Fe(100) 287/288 (1993) 736
G.G. Kleiman, R. Landers, S.G.C. de Castro and P.A.P. Nascente, Core-level Auger energy shifts in palladium alloys 287/288 (1993) 794
G.G. Kleiman, R. Landers, P.A.P. Nascente and S.G.C. de Castro, $L_3M_{4,5}M_{4,5}$ Auger transitions and screening mechanisms in the 4d metals 287/288 (1993) 798
R. Landers, P.A.P. Nascente, S.G.C. de Castro and G.G. Kleiman, Bremsstrahlung-excited LMN and LMM Auger spectra of Nb, Mo, Pd, and Ag 287/288 (1993) 802
J. du Plessis, Sequential surface segregation kinetics of the ternary system Fe–Si–S 287/288 (1993) 857
M. Wemmenhove and T. Hibma, Structure and coverage of epitaxial Pb-layers on Si(111)(7×7) 287/288 (1993) 925
S. Poulston, M. Tikhov and R.M. Lambert, Oxygen chemisorption on lead and gold precovered Ru(100) surfaces 287/288 (1993) 969
D.A. Hutt and D.W. Bassett, Growth of Ir overlayers on a Mo(110) surface 287/288 (1993) 1000
P. Kruit, Nanometer resolution analysis of surfaces 287/288 (1993) 1067
S. Di Nardo, L. Lozzi, M. Passacantando, P. Picozzi, S. Santucci and M. De Crescenzi, Extended fine Auger structure investigation of discontinuous copper films deposited on graphite 287/288 (1993) 1087
S. Kono, N. Nakamura, K. Anno and S. Teruyama, Study of solid surfaces using micro-electron-beams 287/288 (1993) 1092
T.M. Jung, R. Kaplan and S.M. Prokes, Ga on Si(112): growth and energetics of thermal desorption 289 (1993) L577
S. Valeri and A. di Bona, P LVV Auger lineshape modulation by incident beam diffraction in InP 289 (1993) L617
Y. Huang and J.M. Cowley, Structure of the sulfur-adsorbed $Cu_3Au(110)$ surface 289 (1993) 340
H. den Daas, O.L.J. Gijzeman and J.W. Geus, Low energy Auger electron spectroscopy of iron oxide: oxidation of one monolayer of iron on Cu(100) 290 (1993) 26
C.-S. Zhang, F.J. Esposto, B.J. Flinn, P.R. Norton and R.S. Timsit, The influence of Li surface segregation on the initial oxidation of an Al–Li alloy at room temperature 290 (1993) 103

Auger electron spectroscopy (continued)
A. Zwartkruis and T. Fondén, Auger rates and spectra for simple models of He^+ in front of a metal surface 290 (1993) 134
W.E.J. van Kooten, D.D. Kragten, O.L.J. Gijzeman and J.W. Geus, Hydrocarbon interaction with clean and oxidised Cu(111) 290 (1993) 302

Band structure
T. Uchiyama and M. Tsukada, Step-induced state of a Si(001) reconstructed surface 282 (1993) 152
H. Nagayoshi, Theoretical study of the electronic structure of the Si(111)$\sqrt{3}\times\sqrt{3}$:Sb surface 282 (1993) 163
C. Girardet and P.N.M. Hoang, Dynamics of a frustrated rare gas monolayer adsorbed on a corrugated substrate: resonance and hybridization of the dispersion curves of Ar on MgO(100) 282 (1993) 288
Y. Morikawa, K. Kobayashi and K. Terakura, First-principles molecular dynamics study of alkali-metal adsorption on a Si(001) surface 283 (1993) 377
N. Memmel, G. Rangelov and E. Bertel, Influence of the substrate on the band structure of alkali metal monolayers 285 (1993) 109
M. Heinrichsmeier, A. Fleszar and A.G. Eguiluz, LDA calculation of the surface states on the (001), (110), and (111) surfaces of aluminum 285 (1993) 129
G. Lee, P.T. Sprunger and E.W. Plummer, Surface plasmon dispersion and damping on Ag(110) 286 (1993) L547
L. Kipp, C. Sellmer, R. Manzke and M. Skibowski, Unoccupied electronic states of Ge(001)2×1 by constant initial band photoemission 287/288 (1993) 520
R. Whittle, E. Dudzik, I.T. McGovern, D.R.T. Zahn, C. Nowak, A. Cafolla and W. Braun, Surface electronic structure of monolayer Bi on InP(110) 287/288 (1993) 554
B. Wenzien, J. Bormet, J. Neugebauer and M. Scheffler, Electronic structure of ($\sqrt{3}\times\sqrt{3}$)R30°-Na and -K on Al(111): comparison of "normal" and substitutional adsorption sites 287/288 (1993) 559
A. Nagashima, K. Nuka, K. Satoh, H. Itoh, T. Ichinokawa, C. Oshima and S. Otani, Electronic structure of monolayer graphite on some transition metal carbide surfaces 287/288 (1993) 609
R. Dudde and B. Reihl, Electronic structure of alkali-metal monolayers on Cu(111) 287/288 (1993) 614
H.I. Starnberg, P.O. Nilsson and H.P. Hughes, Adsorbate induced enhancement of secondary electron emission from the layered compound VSe_2 287/288 (1993) 627
K. Edamoto, T. Anazawa, E. Miyazaki, H. Kato and S. Otani, Chemisorption state of atomic oxygen on TiC(100) surface: angle-resolved photoemission study 287/288 (1993) 667
E. Hulpke and J. Lüdecke, The giant surface phonon anomaly on hydrogen saturated W(110) and Mo(110) 287/288 (1993) 837
M. Tsukada, K. Kobayashi, N. Isshiki, H. Kageshima, T. Uchiyama, S. Watanabe and T. Schimizu, Novel features of surface electronic structure revealed by the theoretical simulation of scanning tunneling microscopy/spectroscopy 287/288 (1993) 1004
S. Watanabe, M. Aono and M. Tsukada, Theoretical calculations of STM images of the Si(111)$\sqrt{3}\times\sqrt{3}$–Ag and –Sb surfaces 287/288 (1993) 1036
A.R.H.F. Ettema, C. Haas, P. Moriarty and G. Hughes, Wave function imaging of the PbS(001) surface with scanning tunneling microscopy 287/288 (1993) 1106
B. Weimert, J. Noffke and L. Fritsche, Electronic and magnetic properties of a Co-monolayer on a W(110) substrate 289 (1993) 397
T. Nagao, K. Kitamura, Y. Iizuka, C. Oshima and S. Otani, Surface phonons of LaB_6(100): deformation of boron octahedra at the surface 290 (1993) 436

Barium
T. Miyake and S. Yamamoto, Diffractive scattering of a helium molecular beam from monatomic layers on a W(110) surface 287/288 (1993) 340
A. Bot, U. van Slooten, W.R. Koppers and A.W. Kleyn, Surface diffusion during thin film annealing studied by XPS 287/288 (1993) 901
T.I.M. Bootsma and T. Hibma, A strain-relieve transition in epitaxial growth of metals on Si(111)(7×7) 287/288 (1993) 921

Benzene
M. Nishijima, M. Fujisawa, T. Takaoka and T. Sekitani, The reaction of benzene with Pd(110) and Pd(110)(1×2)–Cs surfaces 283 (1993) 121

Beryllium
V. Lossev and J. Küppers, Adsorption of hydrogen on Be(0001) surfaces 284 (1993) 175
K.B. Ray, X. Pan and E.W. Plummer, The interaction of H with Be(0001): a photoemission investigation 285 (1993) 66
T. Hashimoto, J. Murakami and I. Kusunoki, Low-energy Ne^+ bombardment on O-adsorbed Be surfaces 287/288 (1993) 46
A. Antonelli, S.N. Khanna and P. Jena, Interplanar relaxation at the (0001) surface of Be 289 (1993) L614

Biological compounds
Z.F. Liu, A. Manivannan, H. Yanagi, M. Ashida, A. Fujishima and H. Inokuchi, Direct observation of the secondary structure of unfolded pseudomonas-cytochrome c_{551} by scanning tunneling microscopy 284 (1993) L411
C. Capasso, W. Ng, A.K. Ray-Chaudhuri, S.H. Liang, R.K. Cole, Z.Y. Guo, J. Wallace, F. Cerrina, J. Underwood, R. Perera, J. Kortright, G. De Stasio and G. Margaritondo, Scanning photoemission microscopy on MAXIMUM reaches 0.1 micron resolution 287/288 (1993) 1046

Bismuth
A. Pavlovska, D. Dobrev and E. Bauer, Surface melting versus surface non-melting: an equilibrium shape study 286 (1993) 176
Wei Li and G. Vidali, Metal adatom induced corrugation of Cu(001) 287/288 (1993) 336
V. De Renzi, M.G. Betti and C. Mariani, Electronic and dielectric properties of Bi grown on GaAs(110) 287/288 (1993) 550
R. Whittle, E. Dudzik, I.T. McGovern, D.R.T. Zahn, C. Nowak, A. Cafolla and W. Braun, Surface electronic structure of monolayer Bi on InP(110) 287/288 (1993) 554

Borides
T. Nagao, T. Kitamura, T. Iizuka, M. Umeuchi, C. Oshima and S. Otani, Deformation of octahedra at LaB_6(100) surface studied by HREELS 287/288 (1993) 391
T. Nagao, K. Kitamura, Y. Iizuka, C. Oshima and S. Otani, Surface phonons of LaB_6(100): deformation of boron octahedra at the surface 290 (1993) 436

Boron
M. Krawczyk and W. Palczewska, A surface study on model Pd(111) catalyst modified with boron 287/288 (1993) 212

Boron nitride
K. Osuch and W.S. Verwoerd, Surface reconstruction of cubic boron nitride (001) 285 (1993) 59

Bromine, see Halogens

Cadmium
D.W. Suggs and J.L. Stickney, Studies of the structures formed by the alternated electrodeposition of atomic layers of Cd and Te on the low-index planes of Au. I. LEED and Auger studies 290 (1993) 362
D.W. Suggs and J.L. Stickney, Studies of the surface structures formed by the alternated electrodeposition of Cd and Te on the low-index planes of Au. II. STM studies 290 (1993) 375

Cadmium telluride
M. Seelmann-Eggebert, G.P. Carey, R. Klauser and H.J. Richter, A case study for XPD in the presence of a compositional depth profile: interface formation between metals (Ag, Al) and HgCdTe 287/288 (1993) 495
A. Dittmar-Wituski and P.J. Møller, Surface spectroscopy from ultrathin α-Sn films on CdTe(110) 287/288 (1993) 577

Calcium
M. Gajdardziska-Josifovska, P.A. Crozier, M.R. McCartney and J.M. Cowley, Ca segregation and step modifications on cleaved and annealed MgO(100) surfaces 284 (1993) 186
A.B. Krasilnikov, A.V. Latyshev and A.L. Aseev, Transformation of a Si(111) stepped surface during the formation of a Si(3×1)Ca superstructure 290 (1993) 232

Carbides
M. Maline, M. Ducarroir, F. Teyssandier, R. Hillel, R. Berjoan, F.J.J. Van Loo and W. Wakelkamp, Auger electron spectroscopy of compounds in the Si–Ti–C system. Characterization of Si–Ti–C multiphased materials obtained by CVD 286 (1993) 82
A. Nagashima, K. Nuka, K. Satoh, H. Itoh, T. Ichinokawa, C. Oshima and S. Otani, Electronic structure of monolayer graphite on some transition metal carbide surfaces 287/288 (1993) 609

Carbon, see also Graphite
M.J. Gallagher, D. Chen, B.P. Jacobsen, D. Sarid, L.D. Lamb, F.A. Tinker, J. Jiao, D.R. Huffman, S. Seraphin and D. Zhou, Characterization of carbon nanotubes by scanning probe microscopy 281 (1993) L335
H. He, J. Nakamura and K. Tanaka, Formation of CH_x species on a Ni(100) surface by the hydrogenation of carbidic carbon 283 (1993) 117
M. Miki-Yoshida, L. Rendón, S. Tehuacanero and M. José-Yacamán, Icosahedral, decahedral and single faulted particles obtained from carbon soot 284 (1993) L444
T. Halicioglu, Carbon atoms on the (2×1) reconstructed Si(100) surface 285 (1993) 259
P. Kruit, Nanometer resolution analysis of surfaces 287/288 (1993) 1067
R. Lamber and N.I. Jaeger, Electron microscopy study of the interaction of Ni, Pd and Pt with carbon. III. Formation of a substitutional Pt–C carbide in ultrafine platinum particles 289 (1993) 247
H.-G. Busmann, R. Hiss, H. Gaber and I.V. Hertel, Growth mechanisms of C_{60}-molecular beam epitaxy on mica 289 (1993) 381

Carbon dioxide
G. Pacchioni, Physisorbed and chemisorbed CO_2 at surface and step sites of the MgO(100) surface 281 (1993) 207

Carbon dioxide (continued)
Y. Ohno, T. Matsushima and H. Miki, Anisotropy in the spatial distribution of reactive carbon dioxide desorption from narrow terraces on a reconstructed iridium (110)(1×2) surface 281 (1993) 234
K. Kunimori, H. Uetsuka, T. Iwade, T. Watanabe and S. Ito, Infrared chemiluminescence of CO and CO_2 produced by molecular-beam surface reactions 283 (1993) 58
J. Sakai, G. Mizutani and S. Ushioda, Bonding of O_2, CO_2, and CO on a Cs/p-GaAs(100) surface and its relation to negative electron affinity 283 (1993) 217
T. Wada, T. Nomura, M. Miyao and M. Hagino, A thermal desorption analysis for the adsorption of CO_2 on GaAs photocathodes 285 (1993) 188
W. Akemann and A. Otto, The effect of atomic scale surface disorder on bonding and activation of adsorbates: vibrational properties of CO and CO_2 on copper 287/288 (1993) 104
D.E.A. Gordon and R.M. Lambert, CO_2 adsorption on oxygen-modified Ni(111) 287/288 (1993) 114
T. Almeida, L.E. Cox, J.W. Ward and J.R. Naegele, Gas adsorption studies on Pu metal by photoemission spectroscopy 287/288 (1993) 141
L. Šiller, K.M. Hock, R.E. Palmer and J.F. Wendelken, Resonance electron scattering by adsorbed molecules: σ^* resonance energy versus bond length 287/288 (1993) 165
M.F.H. van Tol, A. Gielbert, R.M. Wolf, A.B.K. Lie and B.E. Nieuwenhuys, The striking difference in the behaviour of Rh and Pt towards their interaction with CO_2 287/288 (1993) 201
I. Chorkendorff, P.B. Rasmussen, H. Christoffersen and P.A. Taylor, The stabilization of adsorbed carbon dioxide by formate on Cu(100) 287/288 (1993) 208
P.J. Møller, S.A. Komolov and E.F. Lazneva, Laser-induced CO_2 desorption from a CO/Cu/ZnO(0001) surface 290 (1993) L677
P. Sjövall and B. Kasemo, A TDS study of oxygen, water and carbon dioxide coadsorption with potassium on graphite 290 (1993) 55

Carbon monoxide
Y. Ohno, T. Matsushima and H. Miki, Anisotropy in the spatial distribution of reactive carbon dioxide desorption from narrow terraces on a reconstructed iridium (110)(1×2) surface 281 (1993) 234
K.-I. Fukui, T. Aruga and Y. Iwasawa, Chemisorption of CO and H_2 on clean and oxygen-modified Mo(112) 281 (1993) 241
L.S. Caputi, R.G. Agostino, A. Amoddeo, E. Colavita and A. Santaniello, X-ray photoelectron diffraction study of CO- and NO-saturated Ni(111) 282 (1993) 62
J. Fan and M. Trenary, The influence of coadsorbates on the overlayer structure of PF_3 on Pt(111) 282 (1993) 76
R. Persaud and R.H. Prince, An inverse photoemission study of CO overlayers on Ru(0001) 282 (1993) 91
C. Pisani, F. Corà, R. Orlando and R. Nada, Ab-initio perturbed-cluster study of carbon monoxide adsorption at a stepped LiF(001) surface 282 (1993) 185
B. Sieben and H.P. Bonzel, Adsorption of H_2 and CO on Mn/Fe(110) surfaces 282 (1993) 246
K. Kunimori, H. Uetsuka, T. Iwade, T. Watanabe and S. Ito, Infrared chemiluminescence of CO and CO_2 produced by molecular-beam surface reactions 283 (1993) 58
H.H. Rotermund, Investigation of dynamic processes in adsorbed layers by photoemission electron microscopy (PEEM) 283 (1993) 87
T. Matsushima, K. Shobatake and Y. Ohno, Spatial and velocity distributions of product desorption in carbon monoxide oxidation over palladium (110) and reconstructed platinum (110)(1×2) surfaces 283 (1993) 101
A. Peremans, K. Fukutani, K. Mase and Y. Murata, UV photodesorption of CO from Pt(001) at 193 nm investigated by state-selective detection 283 (1993) 189

Carbon monoxide (continued)
A. Takano and K. Ueda, Electron stimulated desorption of O^+ from CO adsorbed on a Ni(110) surface 283 (1993) 199
J. Sakai, G. Mizutani and S. Ushioda, Bonding of O_2, CO_2, and CO on a Cs/p-GaAs(100) surface and its relation to negative electron affinity 283 (1993) 217
R.R. Cavanagh, E.J. Heilweil and J.C. Stephenson, Time-resolved probes of surface dynamics 283 (1993) 226
M. Nakamura, H. Ogasawara, J. Inukai and M. Ito, CO migration on Pt(100) and Pt(11 1 1) surfaces studied by time resolved infrared reflection–adsorption spectroscopy 283 (1993) 248
N. Al-Sarraf, J.T. Stuckless, C.E. Wartnaby and D.A. King, Adsorption microcalorimetry and sticking probabilities on metal single crystal surfaces 283 (1993) 427
X. Xu, J.-W. He and D.W. Goodman, A surface spectroscopic study of metal–support interactions: model studies of copper on thin SiO_2 films 284 (1993) 103
A. Sellidj and B.E. Koel, CO chemisorption properties of ultrathin Pd films on Ta(110) 284 (1993) 139
R.K. Brandt, M.R. Hughes, L.P. Bourget, K. Truszkowska and R.G. Greenler, The interpretation of CO adsorbed on Pt/SiO_2 of two different particle-size distributions 286 (1993) 15
A. Görling, L. Ackermann, J. Lauber, P. Knappe and N. Rösch, On the coadsorption of CO and alkali atoms at transition metal surfaces: a LCGTO-LDF cluster study 286 (1993) 26
M. Tüshaus, P. Gardner and A.M. Bradshaw, A high resolution vibrational spectroscopic study of CO/K coadsorption on Pt{111} 286 (1993) 212
G. Ertl, Self-organization in reactions at surfaces 287/288 (1993) 1
A. Takano and K. Ueda, Energy distributions of oxygen ions desorbed from CO- and NO-covered nickel 287/288 (1993) 25
W. Akemann and A. Otto, The effect of atomic scale surface disorder on bonding and activation of adsorbates: vibrational properties of CO and CO_2 on copper 287/288 (1993) 104
A. Atli, M. Abon and J.C. Bertolini, Carbon monoxide adsorption on the (111) and (110) faces of a $Pt_{50}Ni_{50}$ single-crystal alloy 287/288 (1993) 110
T. Almeida, L.E. Cox, J.W. Ward and J.R. Naegele, Gas adsorption studies on Pu metal by photoemission spectroscopy 287/288 (1993) 141
U. Schneider, G.R. Castro and K. Wandelt, Adsorption on ordered $Cu_3Pt(111)$: site selectivity 287/288 (1993) 146
T. Matsushima, Y. Ohno and J.-I. Murakami, Spatial and velocity distributions of desorbing product carbon dioxide over a reconstructed platinum (110)(1×2) surface 287/288 (1993) 192
J.P. Warren, X. Zhang, J.E.T. Andersen and R.M. Lambert, Growth of Ce on Rh, surface alloy formation and the preparation and properties of Rh/ceria model planar catalysts 287/288 (1993) 222
B. Rausenberger, W. Święch, W. Engel, A.M. Bradshaw and E. Zeitler, LEEM and selected-area LEED studies of reaction from propagation 287/288 (1993) 235
E. Poehlmann, M. Schmitt, H. Hoinkes and H. Wilsch, Velocity distributions of carbondioxide molecules from the oxidation of CO on Pt(111) 287/288 (1993) 269
K.L. Kostov, H. Rauscher and D. Menzel, The role of coadsorbed oxygen in NCO formation on Ru(001) 287/288 (1993) 283
D. Lovrić and B. Gumhalter, "Fast" and "slow" screening effects in inverse photoemission spectra of CO/Cu(110) 287/288 (1993) 789
Y. Wang and W.H. Weinberg, Enhancing the resolution of electron energy loss spectroscopy by digital signal processing techniques 287/288 (1993) 1102
J.A. Rodriguez, The chemical properties of bimetallic surfaces: bonding between CO and Zn on Ru(001) 289 (1993) L584

Carbon monoxide (continued)
L.S. Caputi, R.G. Agostino, A.Amoddeo, S. Molinaro, G. Chiarello, E. Colavita and A. Santaniello, Orientational study of low coverage CO and NO on Ni(111) 289 (1993) L591
E. Shustorovich and A.T. Bell, Decomposition and reduction of NO on transition metal surfaces: bond order conservation Morse potential analysis 289 (1993) 127
Y.-W. Yang, J.C. Lin and T. Engel, Desorption kinetics of CO from epitaxial Pd films on W(110) in the low coverage limit 289 (1993) 267
M. Croci, C. Félix, G. Vandoni, W. Harbich and R. Monot, Measurement of macroscopic diffusion of CO on Pt(111) by thermal helium scattering 290 (1993) L667
P.J. Møller, S.A. Komolov and E.F. Lazneva, Laser-induced CO_2 desorption from a CO/Cu/ZnO(0001) surface 290 (1993) L677
G. Blyholder and M. Lawless, A theoretical study of the site of CO dissociation on Fe(100) 290 (1993) 155

Carboxylic acid
K. Domen, N. Akamatsu, H. Yamamoto, A. Wada and C. Hirose, Infrared-visible sum frequency generation study of HCOOH on an MgO(001) surface 283 (1993) 468
J. Lin, A.T.S. Wee, A.C.H. Huan and K.L. Tan, SIMS study of the formic acid adsorption on polycrystalline copper and CuCl(111) surfaces 285 (1993) 31
Y. Li and M. Bowker, Acetate formation, stabilisation and surface explosion on Rh(111) 285 (1993) 219
I. Chorkendorff, P.B. Rasmussen, H. Christoffersen and P.A. Taylor, The stabilization of adsorbed carbon dioxide by formate on Cu(100) 287/288 (1993) 208
M.B. Jensen, U. Myler and P.A. Thiel, Local and collective structure of formate on Pt(111) 290 (1993) L655

Cerium, see Lanthanides

Cesium, see Alkali metals

Chalcogens
M. Sekoguchi, Y. Uehara and S. Ushioda, Combined Raman/HREELS study of ZnSe–ZnS strained-layer superlattices 283 (1993) 355
H.I. Starnberg, P.O. Nilsson and H.P. Hughes, Adsorbate induced enhancement of secondary electron emission from the layered compound VSe_2 287/288 (1993) 627
H.I. Starnberg and P.O. Nilsson, Thermal effects in angle-resolved photoemission: is it possible to separate direct and indirect transitions? 287/288 (1993) 776
J.M. Gaines and C.A. Ponzoni, Beating in RHEED oscillations observed during MEE growth of ZnSe 290 (1993) 172

Chemical vapour deposition
J. Wintterlin and Ph. Avouris, Hydrogen effects in CVD: selective etching and metastable phases 286 (1993) L529
B.J. Hinch, R.B. Doak and L.H. Dubois, Surface topography changes induced by chemical vapor deposition of aluminum on Al(111) 286 (1993) 261

Chemisorption theory
G. Pacchioni, Physisorbed and chemisorbed CO_2 at surface and step sites of the MgO(100) surface 281 (1993) 207
X.M. Zheng and P.V. Smith, Hydrogen chemisorption on the Si(111) surface 282 (1993) 173
C. Pisani, F. Corà, R. Orlando and R. Nada, Ab-initio perturbed-cluster study of carbon monoxide adsorption at a stepped LiF(001) surface 282 (1993) 185

Chemisorption theory (continued)
I. Pápai, J. Ushio and D.R. Salahub, Chemisorption of formate and acetate on cluster models of Rh and bimetallic RhSn clusters 282 (1993) 262
J. Goniakowski, S. Bouette-Russo and C. Noguera, Acido-basic properties of simple oxide surfaces. III. Systematics of H^+ and OH^- adsorption 284 (1993) 315
G.J.C.S. van de Kerkhof, W. Biemolt, A.P.J. Jansen and R.A. van Santen, Dissociation of ammonia on a copper surface and the effect of oxygen coadsorption: a quantum-chemical study 284 (1993) 361
B.I. Craig, A theoretical examination of the electron localisation within a small hydrogen covered silicon outcrop on Si(001) 285 (1993) L486
J.M. Lopez Sancho, M.C. Refolio, M.P. Lopez Sancho and J. Rubio, Extended Hubbard model analysis of semiconductor–alkali interfaces: implications for the metallization problem 285 (1993) L491
K. Gundersen, B. Hammer, K.W. Jacobsen, J.K. Nørskov, J.S. Lin and V. Milman, Chemisorption and vibration of hydrogen on Cu(111) 285 (1993) 27
I.G. Medvedev, Exact calculations of the ground state properties of hydrogen chemisorbed on a transition metal with one electron or hole in the energy band for the Anderson–Newns model 285 (1993) 117
T. Halicioglu, Carbon atoms on the (2×1) reconstructed Si(100) surface 285 (1993) 259
A. Görling, L. Ackermann, J. Lauber, P. Knappe and N. Rösch, On the coadsorption of CO and alkali atoms at transition metal surfaces: a LCGTO-LDF cluster study 286 (1993) 26
I. Al-Hayek and Ş. Katircioglu, Water adsorption on the Si(110) surface 286 (1993) 92
Z.-H. Huang and H. Guo, A novel method for simulating atoms and molecules interacting with ionic surfaces 286 (1993) 182
G. Pacchioni and P.S. Bagus, Alkali adsorbates on metal surfaces: observable consequences of the ionic K/Cu(100) interaction 286 (1993) 317
M. Lindblad and T.A. Pakkanen, Cluster models for the interaction of HCl with non-polar surfaces of γ-Al_2O_3 286 (1993) 333
J. Harris and A.C. Luntz, On tunneling-dissociation at surfaces 287/288 (1993) 56
K.M. Neyman and N. Rösch, Negatively charged μ_3-ON species on Ag(111): a LCGTO-LDF cluster analysis of HREELS data 287/288 (1993) 64
D. Hennig, S. Wilke, R. Löber and M. Methfessel, The adsorption of hydrogen on Pd(100) and Rh(100) surfaces: a comparative theoretical study 287/288 (1993) 89
W. Biemolt, A.P.J. Jansen, M. Neurock, G.J.C.S. van de Kerkhof and R.A. van Santen, The oxidation of ammonia by copper 287/288 (1993) 183
C. Noguera, J. Goniakowski and S. Bouette-Russo, Electronic structure of clean and hydroxylated oxide surfaces 287/288 (1993) 188
J. Neugebauer and M. Scheffler, Theory of adsorption and desorption in high electric fields 287/288 (1993) 572
O. Pankratov and M. Scheffler, Electron correlations on a potassium-covered GaAs(110) surface: ab-initio calculations of the Hubbard correlation energy 287/288 (1993) 584
B. Piveteau, D. Spanjaard and M.C. Desjonquères, Relative stability of ternary adsorption sites on (111) fcc and (0001) hcp transition-metal surfaces 287/288 (1993) 946
H. Yang and J.L. Whitten, Reaction of CH_4 with substitutional Fe/Ni(111) 289 (1993) 30
T.R. Ward, R. Hoffmann and M. Shelef, Coupling nitrosyls as the first step in the reduction of NO on metal surfaces: the special role of rhodium 289 (1993) 85
E. Shustorovich and A.T. Bell, Decomposition and reduction of NO on transition metal surfaces: bond order conservation Morse potential analysis 289 (1993) 127
Ru-Hong Zhou, Pei-Lin Cao and Li-Quan Lee, Cluster models study of Ag bonding, migration and interaction on Si(100)-2×1 290 (1993) L649
B.I. Craig and P.V. Smith, Monolayer chemisorption of HCl and Cl_2 on the Si(001)2×1 surface 290 (1993) L662

Chemisorption theory (continued)
G. Blyholder and M. Lawless, A theoretical study of the site of CO dissociation on Fe(100) 290 (1993) 155

Chlorine, see Halogens

Chromium
P. Dubot, E. Alleno, M.-G. Barthés-Labrousse, C. Binns, C. Nicklin, C. Norris and D. Ravot, Electronic properties of low-dimensional Sm films adsorbed on Cr(211) and Cr(110) 282 (1993) 1
Y. Teraoka and Y. Tabata, Surface lattice relaxation in chromium 287/288 (1993) 754
D. Rouyer, C. Krembel, M.C. Hanf, D. Bolmont and G. Gewinner, X-ray photoelectron diffraction from ultra-thin Cr layers on Au(100) and Ag(100): a comparison 287/288 (1993) 935

Clusters
B.N.J. Persson, Polarizability of small spherical metal particles: influence of the matrix environment 281 (1993) 153
I. Pápai, J. Ushio and D.R. Salahub, Chemisorption of formate and acetate on cluster models of Rh and bimetallic RhSn clusters 282 (1993) 262
J.K. Nørskov, K.W. Jacobsen, P. Stoltze and L.B. Hansen, Many-atom interactions in metals 283 (1993) 277
L. Yang, T.J. Raeker and A.E. DePristo, Surface segregation in bimetallic clusters: predictions using a molecular dynamics/Monte Carlo corrected effective medium theory 290 (1993) 195

Cobalt
U. Bardi, A. Atrei, B. Cortigiani, G. Rovida and M. Torrini, X-ray photoelectron diffraction study of an oxidized Pt–Co(001) alloy surface: evidence for atomic scale rippling of the CoO overlayer 282 (1993) L365
P.C. Görts, B.H.P. Dorren and F.H.P.M. Habraken, Oxidation of the Co(10$\bar{1}$0) surface 287/288 (1993) 255
M. Finazzi, L. Duò, G. Bacchin, F. Ciccacci and E. Puppin, Ultraviolet inverse photoemission study of the oxidation of Fe, Co and Ni 287/288 (1993) 264
G. Spierings, V. Koutsos, H.A. Wierenga, M.W.J. Prins, D.L. Abraham and Th. Rasing, Optical second harmonic generation study of interface magnetism 287/288 (1993) 747
B. Weimert, J. Noffke and L. Fritsche, Electronic and magnetic properties of a Co-monolayer on a W(110) substrate 289 (1993) 397

Computer simulations
A. Antonelli, S.N. Khanna and P. Jena, Interplanar relaxation at the (0001) surface of Be 289 (1993) L614

Conductivity
P. Viščor and J. Vedde, Electrical impedance spectroscopy of silicon surface states 287/288 (1993) 510

Copper
B.J. Cruickshank, D.D. Sneddon and A.A. Gewirth, In situ observations of oxygen adsorption on a Cu(100) substrate using atomic force microscopy 281 (1993) L308
M. Wuttig and J. Thomassen, Structure determination for Fe films on Cu(100) 282 (1993) 237
D.J. Auerbach, C.T. Rettner and H.A. Michelsen, Interaction dynamics of hydrogen at a Cu(111) surface 283 (1993) 1

Copper (continued)
S.C. Park, C.H. Cho and C.H. Rhee, Theoretical studies of polyatomic reactions on metal surfaces: Al + $SiCl_4$ and Cu + $SiCl_4$ model systems 283 (1993) 70
K. Yagi, A. Yamanaka and H. Yamaguchi, Surface electromigration of metals on Si surfaces studied by UHV-REM 283 (1993) 300
M. Sasaki, J. Yuhara, M. Inoue and K. Morita, Studies on 2D Au–Cu binary adsorbates on Si(111) surfaces by means of combined LEED/AES/RBS techniques 283 (1993) 327
T. Munakata and T. Kasuya, Laser based photoelectron spectromicroscope 283 (1993) 452
Y.U. Idzerda and G.A. Prinz, Auger intensity mapping of monolayers of Ni/Cu(001) 284 (1993) L394
X. Xu, J.-W. He and D.W. Goodman, A surface spectroscopic study of metal–support interactions: model studies of copper on thin SiO_2 films 284 (1993) 103
B. Afsin, P.R. Davies, A. Pashusky, M.W. Roberts and D. Vincent, Reaction pathways in the oxydehydrogenation of ammonia at Cu(110) surfaces 284 (1993) 109
B.H. Loo and T. Kato, The bonding of acrylonitrile molecules to copper surfaces 284 (1993) 167
G.J.C.S. van de Kerkhof, W. Biemolt, A.P.J. Jansen and R.A. van Santen, Dissociation of ammonia on a copper surface and the effect of oxygen coadsorption: a quantum-chemical study 284 (1993) 361
H. den Daas, O.L.J. Gijzeman and J.W. Geus, Oxidation of ultrathin iron layers on Cu(100). Composition of the oxide films 285 (1993) 15
K. Gundersen, B. Hammer, K.W. Jacobsen, J.K. Nørskov, J.S. Lin and V. Milman, Chemisorption and vibration of hydrogen on Cu(111) 285 (1993) 27
J. Lin, A.T.S. Wee, A.C.H. Huan and K.L. Tan, SIMS study of the formic acid adsorption on polycrystalline copper and CuCl(111) surfaces 285 (1993) 31
G.W. Lloyd and D.P. Woodruff, Do oxygen-induced Cu(410) facets reconstruct? 285 (1993) L503
P. Hu, A. Wander, L. Morales de la Garza, M.P. Bessent and D.A. King, An adsorbate-stabilised vacancy structure for Cu on W{100}: a surface alloy 286 (1993) L542
R. Matzdorf, G. Meister and A. Goldmann, Temperature-dependent photoemission spectra from Cu(100) and Cu(111) surfaces 286 (1993) 56
Th. Rodach, K.-P. Bohnen and K.M. Ho, First principles calculations of lattice relaxation at low index surfaces of Cu 286 (1993) 66
T. Munakata, K. Mase and I. Kinoshita, Two-photon photoemission from NO adsorbed on Cu(111) 286 (1993) 73
D.M. Halstead and A.E. DePristo, Thin film growth and the scattering of atoms from surface island defects 286 (1993) 275
G. Pacchioni and P.S. Bagus, Alkali adsorbates on metal surfaces: observable consequences of the ionic K/Cu(100) interaction 286 (1993) 317
R. Harder, K. Tellioglu, A. Nesbitt, G. Herrmann, A. Golichowski and K.J. Snowdon, Role of projectile-motion-induced electronic transitions in the dissociation of fast H_2 at a Cu(111) surface 287/288 (1993) 16
P.B. Rasmussen, P.M. Holmblad, H. Christoffersen, P.A. Taylor and I. Chorkendorff, Dissociative adsorption of hydrogen on Cu(100) at low temperatures 287/288 (1993) 79
W. Akemann and A. Otto, The effect of atomic scale surface disorder on bonding and activation of adsorbates: vibrational properties of CO and CO_2 on copper 287/288 (1993) 104
J. Ahner and H.-W. Wassmuth, Molecular and dissociative chemisorption and condensation of SO_2 on Cu(111) 287/288 (1993) 125
C.L.A. Lamont, H. Conrad and A.M. Bradshaw, The photodissociation of methyl bromide chemisorbed on Cu{111}: influence of pre-adsorbed bromine 287/288 (1993) 169
W. Biemolt, A.P.J. Jansen, M. Neurock, G.J.C.S. van de Kerkhof and R.A. van Santen, The oxidation of ammonia by copper 287/288 (1993) 183
I. Chorkendorff, P.B. Rasmussen, H. Christoffersen and P.A. Taylor, The stabilization of adsorbed carbon dioxide by formate on Cu(100) 287/288 (1993) 208

Copper (continued)
Wei Li and G. Vidali, Metal adatom induced corrugation of Cu(001) 287/288 (1993) 336
H. Tochihara and S. Mizuno, Geometries of Li induced structures on Cu(001): LEED and ARUPS studies 287/288 (1993) 423
C. Mottet, G. Tréglia and B. Legrand, Topology of a Ag monolayer on a Cu(111) substrate: a tight-binding quenched molecular dynamics study 287/288 (1993) 476
R. Dudde and B. Reihl, Electronic structure of alkali-metal monolayers on Cu(111) 287/288 (1993) 614
H.I. Starnberg and P.O. Nilsson, Thermal effects in angle-resolved photoemission: is it possible to separate direct and indirect transitions? 287/288 (1993) 776
D. Lovrić and B. Gumhalter, "Fast" and "slow" screening effects in inverse photoemission spectra of CO/Cu(110) 287/288 (1993) 789
O. Biham, L.-W. Chen and G. Vidali, Models for monolayers adsorbed on a square substrate 287/288 (1993) 815
M. Breeman and D.O. Boerma, Atomic mobilities on a stepped Cu(100) surface 287/288 (1993) 881
U. Diebold, J.-M. Pan and T.E. Madey, Ultrathin metal films on TiO_2(110): metal overlayer spreading and surface reactivity 287/288 (1993) 896
T.I.M. Bootsma and T. Hibma, A strain-relieve transition in epitaxial growth of metals on Si(111)(7×7) 287/288 (1993) 921
D. Naumović, J. Osterwalder, A. Stuck, P. Aebi and L. Schlapbach, Growth of Au on Cu(001) studied by full hemispherical photoelectron diffraction 287/288 (1993) 950
Wei Li and G. Vidali, Growth of metastable high-order commensurate overlayers of Pb on Cu(001) 287/288 (1993) 955
M. Schick, J. Schäfer, K. Kalki, G. Ceballos, P. Reinhardt, H. Hoffschulz and K. Wandelt, Miscibility within monolayer Ag–Cu films on Ru(0001) 287/288 (1993) 960
S. Nakanishi, K. Kawamoto and K. Umezawa, The initial stages of deposition of Au and Ag on Cu(001) studied by low-energy ion scattering 287/288 (1993) 974
M. Schmidt, H. Wolter, M. Schick, K. Kalki and K. Wandelt, Compression phases in copper/oxygen coadsorption layers on a Ru(0001) surface 287/288 (1993) 983
A. Brodde and H. Neddermeyer, Scanning tunneling microscopy on the growth of Fe films on Cu(100) 287/288 (1993) 988
T. Yasue, T. Koshikawa, H. Tanaka and I. Sumita, Initial stage of Cu growth on Si(111)7×7 surface studied by scanning tunneling microscopy 287/288 (1993) 1025
G. Moretti and P. Porta, Application of the Auger parameter in the characterization of small copper particles supported on insulators 287/288 (1993) 1076
S. Di Nardo, L. Lozzi, M. Passacantando, P. Picozzi, S. Santucci and M. De Crescenzi, Extended fine Auger structure investigation of discontinuous copper films deposited on graphite 287/288 (1993) 1087
R. Zhang, A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1
L.B. Hansen, P. Stoltze, K.W. Jacobsen and J.K. Nørskov, Activation free energy and entropy for the normal and exchange selfdiffusion processes on Cu(100) 289 (1993) 68
J. Goerge, P. Zeppenfeld, R. David, M. Büchel and G. Comsa, Structure of the hydrogen covered Cu(110) surface studied with thermal energy helium scattering 289 (1993) 201
R. Harder, A. Nesbitt, J.-H. Rechtien, W. Mix, C. Röthig, M. Kato and K.J. Snowdon, Evidence for hot electron induced angular straggling of Ne beams scattered from Cu(111) 289 (1993) 214
R. Raval, S.F. Parker and M.A. Chesters, C–H· · ·M interactions and orientational changes of cyclohexane on Cu(111): a RAIRS, EELS and LEED study 289 (1993) 227
P.J. Møller, S.A. Komolov and E.F. Lazneva, Laser-induced CO_2 desorption from a CO/Cu/ZnO(0001) surface 290 (1993) L677
H.T. Liu and Z. Wu, The role of secondary electrons in electron-assisted adsorption process 290 (1993) L685

Copper (continued)
H. den Daas, O.L.J. Gijzeman and J.W. Geus, Low energy Auger electron spectroscopy of iron oxide: oxidation of one monolayer of iron on Cu(100) 290 (1993) 26
X. Shi, D. Tang, D. Heskett, K.-D. Tsuei, H. Ishida and Y. Morikawa, Coverage-dependent core level photoemission investigations of Na/Cu(111) and Na/Ni(111) 290 (1993) 69
D.D. Koleske and S.J. Sibener, Molecular dynamics simulations of the basal planes of Ni and Cu using Finnis–Sinclair potentials 290 (1993) 179
M. Hernández, S. Miret-Artés, P. Villarreal and G. Delgado-Barrio, Selective adsorption resonances at rainbow conditions in the scattering of atoms by stepped surfaces: application to the ^{4}He/Cu(117) system 290 (1993) L693
P.G. Strupp, P.C. Stair and E. Weitz, Three-photon photoemission from Cu(100): observation of an unoccupied surface state near $\bar{\Gamma}$ 290 (1993) L699
W.E.J. van Kooten, D.D. Kragten, O.L.J. Gijzeman and J.W. Geus, Hydrocarbon interaction with clean and oxidised Cu(111) 290 (1993) 302
K. Kishi, K. Hirai and T. Yamamoto, XPS and XAES study for oxidation of V/Cu(100) and V, Na/Cu(100) surfaces 290 (1993) 309

Deuterium
Y.-S. Park, J.-S. Bang and J. Lee, Angular distribution of D_2 desorbing from the monodeuteride phase on a Si(100) surface 283 (1993) 209
U. Albrecht, P. Evers and P. Leiderer, Annealing behavior of quench-condensed hydrogen and deuterium films 283 (1993) 419
E. Vives and P.-A. Lindgård, Theory and Monte Carlo simulation of adsorbates on corrugated surfaces 284 (1993) L449
B.A. Chuikov, V.V. Dvurechenskikh, V.D. Osovskii, Yu.G. Ptushinskii and V.G. Sukretnyi, Adsorption of H_2 and D_2 on W(111) and W(110) surfaces at low temperatures (down to 5 K) 285 (1993) 75
A.M. Glines and A.B. Anton, Effects of the hydrogen-induced (1×2) surface reconstruction on the kinetics of ethylene hydrogenation on Ni(110) 286 (1993) 122
K.-H. Allers, H. Pfnür, P. Feulner and D. Menzel, Associative desorption of HD and D_2 from a Ni(100) surface: angular and velocity distributions 286 (1993) 297
G. Ghiotti, A. Chiorino and F. Boccuzzi, Surface chemistry and electronic effects of H_2 (D_2) on two different microcrystalline ZnO powders 287/288 (1993) 228
D.A. Hutt and D.W. Bassett, Growth of Ir overlayers on a Mo(110) surface 287/288 (1993) 1000
R. Souda, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy D^+ scattering from Cs and CsCl adsorbed on the Si(100)2×1 surface 290 (1993) 245

Diamond
H. Yamazaki and A. Uchiyama, Graphite formation on natural diamond (111) surfaces by electron irradiation and heat treatment 287/288 (1993) 308

Dielectric constant
B.N.J. Persson, Polarizability of small spherical metal particles: influence of the matrix environment 281 (1993) 153
H. Sakai, Y.H. Ohtsuki and M. Kitagawa, Calculation of the dynamical image potential at metal surfaces 283 (1993) 84
K. Obara, M. Shioga and T. Hirose, Phase transitions of adsorbed oxygen on niobium superfine particles 283 (1993) 387
M.K. Kelly, S. Zollner and M. Cardona, Modelling the optical response of surfaces measured by spectroscopic ellipsometry: application to Si and Ge 285 (1993) 282
H. Nitta, S. Shindo and M. Kitagawa, Classical theory of the dielectric function for an inhomogeneous electron gas 286 (1993) 346

Dielectric constant (continued)
A. Kiejna, Image plane position at a charged surface of stabilized jellium 287/288 (1993) 618
T.H. Shen and C.C. Matthai, Calculation of the optical properties of As molecules on Si substrates 287/288 (1993) 672
D. Samuelsen, A. Yang and W. Schattke, Detection of the longitudinal photon field in surface screening 287/288 (1993) 676
E. Piparo and R. Girlanda, Linear and non-linear optical properties of surfaces and spatially non-local potentials 287/288 (1993) 699
U. Rossow, U. Frotscher, W. Richter and D.R.T. Zahn, In situ optical characterisation with monolayer sensitivity: the As-terminated Si(111) surface 287/288 (1993) 718
Y. Okuno, M. Kuwahara, M. Fukui and Y. Shintani, The effects of residual gases on optical constants of Al films 290 (1993) 421

Diffusion
T. Hansson and L. Holmlid, Velocity distribution of Cs atoms emitted from a hot graphite-covered Ir surface after diffusion through the Ir bulk 282 (1993) L370

Dimethyl ether, see Organic substances

Electron diffraction, see also Low energy electron diffraction
U. Grosche, H. Hamadeh, O. Knauff, R. David and H.P. Bonzel, Orientation of adsorbed ethylene oxide on Ni(110) by X-ray photoelectron diffraction 281 (1993) L341
T.T. Tran, S. Thevuthasan, Y.J. Kim, D.J. Friedman, A.P. Kaduwela, G.S. Herman and C.S. Fadley, Photoelectron diffraction and photoelectron holography study of a Ge(111) high-temperature surface phase transition 281 (1993) 270
K. Fukutani, Promotion of epitaxial growth of Ge by Ag and Pb deposited on a clean Ge(111) surface 281 (1993) 285
R.S. Saiki, A.P. Kaduwela, M. Sagurton, J. Osterwalder, D.J. Friedman, C.S. Fadley and C.R. Brundle, X-ray photoelectron diffraction and low-energy electron diffraction study of the interaction of oxygen with the Ni(001) surface: c(2×2) to saturated oxide 282 (1993) 33
L.S. Caputi, R.G. Agostino, A. Amoddeo, E. Colavita and A. Santaniello, X-ray photoelectron diffraction study of CO- and NO-saturated Ni(111) 282 (1993) 62
H. Li and S.Y. Tong, Imaging atoms in surface dimers of GaAs(001)-c(2×8)/(2×4) by electron-emission holography 282 (1993) 380
D.P. Woodruff, Structural studies of adsorbed and coadsorbed molecular species 283 (1993) 309
S. Ino, T. Yamanaka and S. Ito, Epitaxial growth of metals on Si and Ge investigated by RHEED-TRAXS and UHV-SEM 283 (1993) 319
X. Bao, J.V. Barth, G. Lehmpfuhl, R. Schuster, Y. Uchida, R. Schlögl and G. Ertl, Oxygen-induced restructuring of Ag(111) 284 (1993) 14
G.S. Herman, E.L. Bullock, M. Yamada, A.P. Kaduwela, D.J. Friedman, S. Thevuthasan, Y.J. Kim, T.T. Tran, C.S. Fadley, Th. Lindner, D.E. Ricken, A.W. Robinson and A.M. Bradshaw, A scanned-angle and scanned-energy photoelectron diffraction study of $(\sqrt{3} \times \sqrt{3})$R30° Ag on Si(111) 284 (1993) 23
M. Gajdardziska-Josifovska, P.A. Crozier, M.R. McCartney and J.M. Cowley, Ca segregation and step modifications on cleaved and annealed MgO(100) surfaces 284 (1993) 186
N. Ohtani, S.M. Mokler, M.H. Xie, J. Zhang and B.A. Joyce, RHEED investigation of Ge surface segregation during gas source MBE of $Si/Si_{1-x}Ge_x$ heterostructures 284 (1993) 305
Y. Huang and J.M. Cowley, A study of the $Cu_3Au(110)$ surface structure by RHEED 285 (1993) 42
P. Aebi, M. Erbudak, A.P. Hitchcock, M. Szymonski, T. Tyliszczak and E. Wetli, Imaging of surfaces by means of secondary electrons 285 (1993) 275

Electron diffraction (continued)
T. Hikita, T. Hanada, M. Kudo and M. Kawai, Structure and electronic state of the TiO_2 and SrO terminated $SrTiO_3(100)$ surfaces 287/288 (1993) 377
E.V. Rakova, RHEED study of the (0001)$LiNbO_3$ surface annealed at high temperature 287/288 (1993) 400
R. Heise and R. Courths, Examination of the electronic structure of $TiO_2(110)$ using photoelectron diffraction 287/288 (1993) 658
H. Minoda, Y. Tanishiro, N. Yamamoto and K. Yagi, Growth of Si on Si(111)$\sqrt{3} \times \sqrt{3}$–In surfaces studied by UHV-REM 287/288 (1993) 915
D. Rouyer, C. Krembel, M.C. Hanf, D. Bolmont and G. Gewinner, X-ray photoelectron diffraction from ultra-thin Cr layers on Au(100) and Ag(100): a comparison 287/288 (1993) 935
D. Naumović, J. Osterwalder, A. Stuck, P. Aebi and L. Schlapbach, Growth of Au on Cu(001) studied by full hemispherical photoelectron diffraction 287/288 (1993) 950
Y. Gotoh and E. Yanokura, Epitaxial growth of MoO_2 on a Mo(110) surface observed by RHEED 287/288 (1993) 979
L.S. Caputi, R.G. Agostino, A.Amoddeo, S. Molinaro, G. Chiarello, E. Colavita and A. Santaniello, Orientational study of low coverage CO and NO on Ni(111) 289 (1993) L591
Y. Ma, S. Lordi, P.K. Larsen and J.A. Eades, Quantitative analyses of RHEED patterns from MBE grown GaAs(001)-2×4 surfaces 289 (1993) 47
Y. Huang and J.M. Cowley, Structure of the sulfur-adsorbed $Cu_3Au(110)$ surface 289 (1993) 340
H.-G. Busmann, R. Hiss, H. Gaber and I.V. Hertel, Growth mechanisms of C_{60}-molecular beam epitaxy on mica 289 (1993) 381
S. Imaduddin and R.J. Lad, Aluminum deposition on NiO(100): growth, structure and composition of the interface 290 (1993) 35
I.S. Tilinin and W.S.M. Werner, Angular and energy distribution of Auger and photoelectrons escaping from non-crystalline solid surfaces 290 (1993) 119
J.M. Gaines and C.A. Ponzoni, Beating in RHEED oscillations observed during MEE growth of ZnSe 290 (1993) 172

Electron ejection, see Electron scattering

Electron emission
K. Töglhofer, F. Aumayr and HP. Winter, Ion-induced electron emission from metal surfaces – insights from the emission statistics 281 (1993) 143
A. Yoshimori, Charge and spin dynamics of excited He atom beam on metal surfaces 283 (1993) 21
S. Masuda and Y. Harada, Deexcitation of rare-gas metastable atoms on semiconductor surfaces: MoS_2 and $LaCoO_3$ 283 (1993) 78
A.G. Borisov, D. Teillet-Billy and J.P. Gauyacq, Singlet-to-triplet conversion in low energy metastable helium–metal surface collisions 284 (1993) 337
S. Hongo, S. Saito, T. Urano and T. Kanaji, Singlet–triplet conversion efficiency of metastable He atoms dependent upon structures of adsorbed alkali metals on Si(100)2×1 287/288 (1993) 588
A. Zwartkruis and T. Fondén, Auger rates and spectra for simple models of He^+ in front of a metal surface 290 (1993) 134
P. Zanardi and C. Calandra, Charge and energy exchange between a metal and a two-level particle in a metastable state 290 (1993) 141

Electron energy loss spectroscopy
B. Ealet and E. Gillet, Palladium alumina interface: influence of the oxide stoichiometry studied by EELS and XPS 281 (1993) 91

Electron energy loss spectroscopy (continued)
I. Abbati, C. Mariani, C. Chemelli and M. Scagliotti, Vibrational and electronic properties of $FePS_3$ studied by HREELS and EELS 281 (1993) 127
P. Dubot, E. Alleno, M.-G. Barthés-Labrousse, C. Binns, C. Nicklin, C. Norris and D. Ravot, Electronic properties of low-dimensional Sm films adsorbed on Cr(211) and Cr(110) 282 (1993) 1
S. Surnev, Interaction of oxygen with a Ge-covered Si(100) surface 282 (1993) 10
M.A. Schildbach and A.V. Hamza, Clean and water-covered sapphire ($1\bar{1}02$) surfaces: structure and laser-induced desorption 282 (1993) 306
X. Xu and D.W. Goodman, The preparation and characterization of ultra-thin silicon dioxide films on a Mo(110) surface 282 (1993) 323
W. Bock, H. Gnaser and H. Oechsner, Modification of crystalline semiconductor surfaces by low-energy Ar^+ bombardment: Si(111) and Ge(100) 282 (1993) 333
H. He, J. Nakamura and K. Tanaka, Formation of CH_x species on a Ni(100) surface by the hydrogenation of carbidic carbon 283 (1993) 117
M. Nishijima, M. Fujisawa, T. Takaoka and T. Sekitani, The reaction of benzene with Pd(110) and Pd(110)(1×2)–Cs surfaces 283 (1993) 121
M. Sekoguchi, Y. Uehara and S. Ushioda, Combined Raman/HREELS study of ZnSe–ZnS strained-layer superlattices 283 (1993) 355
B. Afsin, P.R. Davies, A. Pashusky, M.W. Roberts and D. Vincent, Reaction pathways in the oxydehydrogenation of ammonia at Cu(110) surfaces 284 (1993) 109
J. Schmidt, Ch. Stuhlmann and H. Ibach, Oxygen adsorption on the Pt(110)(1×2) surface studied with EELS 284 (1993) 121
A. Sellidj and B.E. Koel, CO chemisorption properties of ultrathin Pd films on Ta(110) 284 (1993) 139
M. Miki-Yoshida, L. Rendón, S. Tehuacanero and M. José-Yacamán, Icosahedral, decahedral and single faulted particles obtained from carbon soot 284 (1993) L444
K. Jacobi and U. Myler, Chemisorption of H, H_2O and C_2H_4 on Si(113): implications for the structure 284 (1993) 223
H. Itoh, S. Narui, H. Tanabe and T. Ichinokawa, Nucleation and surface reconstruction of Pd on Si(100) observed by scanning tunneling microscopy 284 (1993) 236
J.C.S. Chu, Y. Bu and M.C. Lin, Spectroscopy and reactions of hydrazoic acid on silicon single crystal surfaces. III. HN_3 and DN_3 on Si(111)(7×7) 284 (1993) 281
J.K.N. Sharma, B.R. Chakraborty and S. Bera, Study of oxidation and silicidation of Ta by electron impact autoionization process 285 (1993) 237
Y. Bu, J.C.S. Chu and M.C. Lin, Thermal stability of trimethyl indium on Si(100)(2×1) as studied with HREELS, UPS and XPS: a comparison with the results from Si(111)(7×7) and Si(110) studies 285 (1993) 243
Z.-M. Liu, X.-L. Zhou, J. Kiss and J.M. White, Interaction of CF_3I with Pt(111) 286 (1993) 233
N. Kizhakevariam and E.M. Stuve, Promotion and poisoning of the reaction of methanol on clean and modified platinum (100) 286 (1993) 246
H. Kondoh, M. Hara, K. Domen and H. Nozoye, Adsorption of hydrogen on Al(111) and Al(110): coverage and temperature dependence of adsorption states 287/288 (1993) 74
K. Ota and S. Usami, Study on the adsorption of oxygen and nitrogen on a W(100) surface with an analysis of electron energy-loss fine structure 287/288 (1993) 99
L. Šiller, K.M. Hock, R.E. Palmer and J.F. Wendelken, Resonance electron scattering by adsorbed molecules: σ^* resonance energy versus bond length 287/288 (1993) 165
J.C. Barnard, K.M. Hock and R.E. Palmer, Intercalation of potassium from the surface of graphite 287/288 (1993) 178
I. Chorkendorff, P.B. Rasmussen, H. Christoffersen and P.A. Taylor, The stabilization of adsorbed carbon dioxide by formate on Cu(100) 287/288 (1993) 208

Electron energy loss spectroscopy (continued)
D.V. Chakarov, P. Sjövall and B. Kasemo, Vibrational spectra of KO_x complexes on graphite 287/288 (1993) 278
K.L. Kostov, H. Rauscher and D. Menzel, The role of coadsorbed oxygen in NCO formation on Ru(001) 287/288 (1993) 283
H. Yamazaki and A. Uchiyama, Graphite formation on natural diamond (111) surfaces by electron irradiation and heat treatment 287/288 (1993) 308
K. Nakayama and S. Usami, LEED and EELS studies on vanadium (110) and (111) single crystal surfaces 287/288 (1993) 355
T. Conard, L. Philippe, P.A. Thiry, Ph. Lambin and R. Caudano, Electron energy-loss spectroscopy and dynamics of $SrTiO_3$(100) 287/288 (1993) 382
T. Nagao, T. Kitamura, T. Iizuka, M. Umeuchi, C. Oshima and S. Otani, Deformation of octahedra at LaB_6(100) surface studied by HREELS 287/288 (1993) 391
M.O. Schweitzer, T.S. Jones, C.F. McConville and N.V. Richardson, The deposition of a thin Au film on InSb(100) 287/288 (1993) 545
V. De Renzi, M.G. Betti and C. Mariani, Electronic and dielectric properties of Bi grown on GaAs(110) 287/288 (1993) 550
A. Dittmar-Wituski and P.J. Møller, Surface spectroscopy from ultrathin α-Sn films on CdTe(110) 287/288 (1993) 577
T.N. Rhodin, B.G. Frederick and G. Apai, Electronic, vibrational and chemical properties of alumina surfaces 287/288 (1993) 638
K. Saiki, W.R. Xu and A. Koma, A novel surface excitation in highly ionic fluorides 287/288 (1993) 644
M. Rocca and U. Valbusa, Electronic excitations on silver single crystal surfaces 287/288 (1993) 770
Y. Wang and W.H. Weinberg, Enhancing the resolution of electron energy loss spectroscopy by digital signal processing techniques 287/288 (1993) 1102
R. Raval, S.F. Parker and M.A. Chesters, C–H· · ·M interactions and orientational changes of cyclohexane on Cu(111): a RAIRS, EELS and LEED study 289 (1993) 227
D.P. Land, W. Erley and H. Ibach, HREELS investigation of the orientation and dehydrogenation of cyclohexane on Pt[111] 289 (1993) 237
R.N. Carter, A.B. Anton and G. Apai, Reactions of π-allyl with atomic oxygen and hydroxyl on Ag(110) 290 (1993) 319
T. Nagao, K. Kitamura, Y. Iizuka, C. Oshima and S. Otani, Surface phonons of LaB_6(100): deformation of boron octahedra at the surface 290 (1993) 436

Electron microscopy
A. Tonscheidt, P.L. Ryder, N.I. Jaeger and G. Schulz-Ekloff, Orientation and morphology of iridium, rhodium and platinum nanocrystals in zeolite X 281 (1993) 51
K. Yagi, A. Yamanaka and H. Yamaguchi, Surface electromigration of metals on Si surfaces studied by UHV-REM 283 (1993) 300
S. Ino, T. Yamanaka and S. Ito, Epitaxial growth of metals on Si and Ge investigated by RHEED-TRAXS and UHV-SEM 283 (1993) 319
Y. Kimura and K. Takayanagi, Incommensurate phase of Sn/Si(100) studied by HR-REM 283 (1993) 349
N. Wang, Y. Uchida and G. Lehmpfuhl, REM study of Au(100) reconstructed surfaces 284 (1993) L419
X. Bao, J.V. Barth, G. Lehmpfuhl, R. Schuster, Y. Uchida, R. Schlögl and G. Ertl, Oxygen-induced restructuring of Ag(111) 284 (1993) 14
M. Gajdardziska-Josifovska, P.A. Crozier, M.R. McCartney and J.M. Cowley, Ca segregation and step modifications on cleaved and annealed MgO(100) surfaces 284 (1993) 186
M. Miki-Yoshida, L. Rendón, S. Tehuacanero and M. José-Yacamán, Icosahedral, decahedral and single faulted particles obtained from carbon soot 284 (1993) L444

Electron microscopy (continued)
P. Xu, D. Dunn, J.P. Zhang and L.D. Marks, Atomic imaging of surfaces in plan view 285 (1993) L479
A. Pavlovska, D. Dobrev and E. Bauer, Surface melting versus surface non-melting: an equilibrium shape study 286 (1993) 176
J. Zhang, B. Heinrich and K. Colbow, Surface observations of fractal patterns on SnO_2 films 286 (1993) 327
B. Rausenberger, W. Święch, W. Engel, A.M. Bradshaw and E. Zeitler, LEEM and selected-area LEED studies of reaction from propagation 287/288 (1993) 235
S. Takagi and T. Gotoh, Observation of a titanium surface by desorbed ion images with a scanning electron microscope 287/288 (1993) 361
M. Remškar, A. Prodan and V. Marinković, Charge-density wave modulation in surface layers of TaS_2 and NbS_2 287/288 (1993) 409
H. Yamaguchi and K. Yagi, Current effects on Si(111) surfaces at the phase transition between the 7×7 and the 1×1 structures 287/288 (1993) 820
H. Minoda, Y. Tanishiro, N. Yamamoto and K. Yagi, Growth of Si on Si(111)$\sqrt{3} \times \sqrt{3}$–In surfaces studied by UHV-REM 287/288 (1993) 915
M. Gajdardziska-Josifovska, M.R. McCartney and D.J. Smith, Reflection electron microscopy studies of GaP(110) surfaces in UHV-TEM 287/288 (1993) 1062
R. Lamber and N.I. Jaeger, Electron microscopy study of the interaction of Ni, Pd and Pt with carbon. III. Formation of a substitutional Pt–C carbide in ultrafine platinum particles 289 (1993) 247
A.B. Krasilnikov, A.V. Latyshev and A.L. Aseev, Transformation of a Si(111) stepped surface during the formation of a Si(3×1)Ca superstructure 290 (1993) 232

Electron scattering
I. Abbati, C. Mariani, C. Chemelli and M. Scagliotti, Vibrational and electronic properties of $FePS_3$ studied by HREELS and EELS 281 (1993) 127
H. Li and S.Y. Tong, Forward-focusing and shadowing effects in solids 281 (1993) L347
Y. Yamamoto, RHEED–TRAXS study of superstructures induced by Ge and Sn adsorption on a Si(110) surface 281 (1993) 253
N.V. Smith, G.K. Wertheim, A.B. Andrews and C.T. Chen, Inelastic electron mean free paths in the alkali metals: effect of the empty d bands 282 (1993) L359
S. Hasegawa and S. Ino, Surface structures and conductance at initial stages in epitaxy of metals on a Si(111) surface 283 (1993) 438
T.I.M. Bootsma and T. Hibma, A strain-relieve transition in epitaxial growth of metals on Si(111)(7×7) 287/288 (1993) 921
I.S. Tilinin and W.S.M. Werner, Angular and energy distribution of Auger and photoelectrons escaping from non-crystalline solid surfaces 290 (1993) 119

Electron spectroscopy, see Auger electron spectroscopy, Electron energy loss spectroscopy, Photoelectron spectroscopy

Electron stimulated desorption
M.R. Davidson, G.B. Hoflund and R.A. Outlaw, Electron stimulated desorption of oxygen atoms and ions from an oxidized Ag–Zr alloy surface 281 (1993) 111
J.E. Whitten, C.E. Young, M.J. Pellin, D.M. Gruen and P.L. Jones, Direct detection of a metal desorption channel: electron-stimulated desorption of aluminum from methanol-dosed Al(111) 282 (1993) 97
M.A. Schildbach and A.V. Hamza, Clean and water-covered sapphire $(1\bar{1}02)$ surfaces: structure and laser-induced desorption 282 (1993) 306

Electron stimulated desorption (continued)
K. Ueda, S. Kodama and A. Takano, Desorption study of a proton from H/Si(100) by electron stimulated desorption spectroscopy 283 (1993) 195
A. Takano and K. Ueda, Electron stimulated desorption of O^+ from CO adsorbed on a Ni(110) surface 283 (1993) 199
D.E. Weibel, T. Hirayama and I. Arakawa, Electron stimulated desorption from the surface of solid Ne: kinetic energy and angular distributions of desorbed metastables 283 (1993) 204
D. Troost, H.J. Clemens, L. Koenders and W. Mönch, Electron-stimulated desorption and adsorption sites of chlorine on GaAs(110) surfaces 286 (1993) 97
Y.B. Zhao, J.E. Whitten and R. Gomer, Electron stimulated desorption of hydrogen from W(110) 286 (1993) 290
A. Takano and K. Ueda, Energy distributions of oxygen ions desorbed from CO- and NO-covered nickel 287/288 (1993) 25
T. Gotoh and S. Takagi, Angular distribution of ions desorbed from clean and H_2O-exposed MgO(001) by electron stimulation 287/288 (1993) 31
A. Aničić and B. Gumhalter, Irreversible energy transfer in ionization of physisorbed adsorbates. II. Inelastic energy spectra of temporarily ionized adatoms 287/288 (1993) 39
C.L. Greenwood, E.M. Williams, G. Thornton, S.L. Bennett, E. Román, J.L. de Segovia and M.C. Torquemada, An ESD and ESDIAD investigation of $TiO_2(110)$–SO_2 287/288 (1993) 386
K. Ueda and A. Takano, Hydrogen termination study of silicon dangling bonds by electron stimulated desorption spectroscopy (TOF-ESD) 287/288 (1993) 506
J. Xu, L. Hudson, R.G. Albridge, A.V. Barnes and N.H. Tolk, Hydrogen exposure-enhanced CN^* emission from alkali-halide surfaces 289 (1993) L622
R.D. Ramsier and J.T. Yates, Jr., Thermal and electron-induced behavior of d_6-benzene-chromium-tricarbonyl adsorbed on Ag(111) 289 (1993) 39
M.B. Jensen, U. Myler and P.A. Thiel, Local and collective structure of formate on Pt(111) 290 (1993) L655
S.L. Bennett, C.L. Greenwood and E.M. Williams, ESDIAD studies of fluorine and chlorine adsorption at Si(100) 290 (1993) 267
S.N. Schauer, R. Thomas and P. Williams, Energy distributions of ions produced by electron-stimulated desorption 290 (1993) 277

Ellipsometry
H. den Daas, O.L.J. Gijzeman and J.W. Geus, Oxidation of ultrathin iron layers on Cu(100). Composition of the oxide films 285 (1993) 15
M.K. Kelly, S. Zollner and M. Cardona, Modelling the optical response of surfaces measured by spectroscopic ellipsometry: application to Si and Ge 285 (1993) 282
G.W.R. Leibbrandt, L.H. Spiekman and F.H.P.M. Habraken, Temperature dependence of thin oxide film growth on Fe(110) 287/288 (1993) 245
P.C. Görts, B.H.P. Dorren and F.H.P.M. Habraken, Oxidation of the Co(10$\bar{1}$0) surface 287/288 (1993) 255
J.D. O'Mahony, J.F. McGilp, M.H.W. Verbruggen and C.F.J. Flipse, Au structures on Si(111) studied by spectroscopic ellipsometry and optical second harmonic generation 287/288 (1993) 713
U. Rossow, U. Frotscher, W. Richter and D.R.T. Zahn, In situ optical characterisation with monolayer sensitivity: the As-terminated Si(111) surface 287/288 (1993) 718
S. Bosch, Double layer ellipsometry: an efficient numerical method for data analysis 289 (1993) 411
W.E.J. van Kooten, D.D. Kragten, O.L.J. Gijzeman and J.W. Geus, Hydrocarbon interaction with clean and oxidised Cu(111) 290 (1993) 302

Emission, see Electron emission

Epitaxy
K. Fukutani, Promotion of epitaxial growth of Ge by Ag and Pb deposited on a clean Ge(111) surface 281 (1993) 285
W.-D. Wang, N.J. Wu, P.A. Thiel and M.C. Tringides, Epitaxial growth in a strained system: Ni(100)–O(7×7) 282 (1993) 229
M. Horn-von Hoegen, M. Pook, A. Al Falou, B.H. Müller and M. Henzler, The interplay of surface morphology and strain relief in surfactant mediated growth of Ge on Si(111) 284 (1993) 53
T.I.M. Bootsma and T. Hibma, A strain-relieve transition in epitaxial growth of metals on Si(111)(7×7) 287/288 (1993) 921
M. Wemmenhove and T. Hibma, Structure and coverage of epitaxial Pb-layers on Si(111)(7×7) 287/288 (1993) 925
S. Rousset, S. Chiang, D.E. Fowler and D.D. Chambliss, Epitaxial growth of Au on Ag(110) studied by scanning tunneling microscopy 287/288 (1993) 941
Ch. Ammer, Stacking faults in epitaxy investigated by SPALEED 287/288 (1993) 964
D.K. Flynn-Sanders, J.W. Evans and P.A. Thiel, Homoepitaxial growth on Pd(100) 289 (1993) 75
J.M. Gaines and C.A. Ponzoni, Beating in RHEED oscillations observed during MEE growth of ZnSe 290 (1993) 172

Etching
C. Su, M. Xi, Z.-G. Dai, M.F. Vernon and B.E. Bent, Dry etching of GaAs with Cl_2: correlation between the surface Cl coverage and the etching rate at steady state 282 (1993) 357
S.C. Park, C.H. Cho and C.H. Rhee, Theoretical studies of polyatomic reactions on metal surfaces: Al + $SiCl_4$ and Cu + $SiCl_4$ model systems 283 (1993) 70
R.W. Dreyfus, Interpreting laser ablation using cross sections 283 (1993) 177
H.-X. You, N.M.D. Brown and K.F. Al-Assadi, Radio-frequency (RF) plasma etching of graphite with oxygen: a scanning tunneling microscope study 284 (1993) 263
I. Ochiai, T. Ogawa, Y. Takakuwa and K. Mochiji, Photon-stimulated desorption from chemically treated Si surfaces 287/288 (1993) 175
H. Shindo and H. Nozoye, Atomic force microscopic study of structures of cleaved surfaces of $CaSO_4$ after wet chemical etching 287/288 (1993) 1030

Ethylene
U. Grosche, H. Hamadeh, O. Knauff, R. David and H.P. Bonzel, Orientation of adsorbed ethylene oxide on Ni(110) by X-ray photoelectron diffraction 281 (1993) L341
K. Griffiths, W.N. Lennerd, I.V. Mitchell, P.R. Norton, G. Pirug and H.P. Bonzel, Saturated ethylene coverage on Pt(111): a comparison of nuclear reaction analysis and X-ray photoemission data 284 (1993) L389
K. Jacobi and U. Myler, Chemisorption of H, H_2O and C_2H_4 on Si(113): implications for the structure 284 (1993) 223
A.J. Mayne, A.R. Avery, J. Knall, T.S. Jones, G.A.D. Briggs and W.H. Weinberg, An STM study of the chemisorption of C_2H_4 on Si(001)(2×1) 284 (1993) 247
A. Cassuto, S. Schmidt and Mane Mane, The interaction of potassium submonolayers adsorbed on Pt(111) with oxygen and the adsorption of ethylene on the resulting modified surfaces: a TDS and UPS study 284 (1993) 273
K.M. Hock and R.E. Palmer, Temperature dependent behaviour in the adsorption of submonolayer potassium on graphite 284 (1993) 349

Ethylene (continued)
B.I. Craig and P.V. Smith, Erratum to "The structures of small hydrocarbons adsorbed on Si(001) and Si terminated β-SiC(001)" [Surface Science 276 (1992) 174] 285 (1993) 295
U. Starke, A. Barbieri, N. Materer, M.A. Van Hove and G.A. Somorjai, Ethylidyne on Pt(111): determination of adsorption site, substrate relaxation and coverage by automated tensor LEED 286 (1993) 1
A.M. Glines and A.B. Anton, Effects of the hydrogen-induced (1×2) surface reconstruction on the kinetics of ethylene hydrogenation on Ni(110) 286 (1993) 122
T. Almeida, L.E. Cox, J.W. Ward and J.R. Naegele, Gas adsorption studies on Pu metal by photoemission spectroscopy 287/288 (1993) 141
A. Cassuto, Mane Mane, G. Tourillon, P. Parent and J. Jupille, Compared bonding geometries of C_2H_4 and C_3H_6 on K-covered Pt(111) surfaces 287/288 (1993) 460
W.E.J. van Kooten, D.D. Kragten, O.L.J. Gijzeman and J.W. Geus, Hydrocarbon interaction with clean and oxidised Cu(111) 290 (1993) 302

Faceting
G.W. Lloyd and D.P. Woodruff, Do oxygen-induced Cu(410) facets reconstruct? 285 (1993) L503
T.E. Madey, J. Guan, C.-Z. Dong and S.M. Shivaprasad, Morphological instabilities induced by ultrathin films on W(111) 287/288 (1993) 826

Field emission, see also Field emission microscopy, Field ion microscopy
Y. Hirai, Total-energy distribution of field-emitted electrons from a W(100) surface 287/288 (1993) 605

Field emission microscopy, see also Field emission
R. Vanselow and X.Q.D. Li, Roughening transitions in the vicinal areas of Ta{110} and Ta{100} observed during vapour growth on clean, thermally rounded Ta crystallites 281 (1993) L326
M.F.H. van Tol, A. Gielbert, R.M. Wolf, A.B.K. Lie and B.E. Nieuwenhuys, The striking difference in the behaviour of Rh and Pt towards their interaction with CO_2 287/288 (1993) 201
H. Miki, T. Nagase, K. Sato, H. Watanabe, S. Sugai, K. Kawasaki and T. Kioka, Structure of Pt(100) for NO adsorption studied by FEM and LEED 287/288 (1993) 448
Y. Song and R. Gomer, Diffusion of oxygen on the Mo(110) plane 290 (1993) 1

Field evaporation, see also Field emission
M. Tsukada and M. Sawamura, Theory of desorption from a negatively biased surface 283 (1993) 182

Field ion microscopy, see also Field emission
G.L. Kellogg, The effect of an externally applied electric field on the reconstruction of Pt(110) 290 (1993) 295

Field ionisation, see also Field emission, Field ion microscopy
T. Hansson and L. Holmlid, Large hysteresis effect in surface ionization of Cs due to bulk diffusion 281 (1993) 309
M. Sato, Ion current characteristics of an Ar field ionization source 285 (1993) L525

Formaldehyde, see Organic substances

Gallium
T.M. Jung, R. Kaplan and S.M. Prokes, Ga on Si(112): growth and energetics of thermal desorption 289 (1993) L577

Gallium arsenide
D.G. Li, N.S. McAlpine and D. Haneman, Surface barriers and potentials from luminescence on cleaved Si, GaAs, and InP 281 (1993) L315
J.W. Erickson, W.M. Theis, T. Cole, A.K. Green and V. Rehn, Erratum to "A photoemission study of coherently strained In_xGa_{1-x}/InP(100)" [Surface Science 274 (1992) 363] 281 (1993) 220
T. Niwa, M. Sugiyama, T. Nakahata, O. Sakata and H. Hashizume, Structure of fluoride/GaAs(111) heteroepitaxial interfaces 282 (1993) 342
C. Su, M. Xi, Z.-G. Dai, M.F. Vernon and B.E. Bent, Dry etching of GaAs with Cl_2: correlation between the surface Cl coverage and the etching rate at steady state 282 (1993) 357
A. Mesarwi and A. Ignatiev, Interaction of Y overlayers with the GaAs(100) surface and oxidation of the Y/GaAs interface 282 (1993) 371
H. Li and S.Y. Tong, Imaging atoms in surface dimers of GaAs(001)-c(2×8)/(2×4) by electron-emission holography 282 (1993) 380
Y. Nakai, K. Hattori, A. Okano, T. Taguchi, J. Kanasaki and N. Itoh, Defect initiated particle emission from semiconductor surfaces by laser irradiation 283 (1993) 169
J. Sakai, G. Mizutani and S. Ushioda, Bonding of O_2, CO_2, and CO on a Cs/p-GaAs(100) surface and its relation to negative electron affinity 283 (1993) 217
Y. Naoi, K. Ito, Y. Uehara and Y. Murata, Very high resolution photoelectron spectra of NEA-GaAs 283 (1993) 457
T. Wada, T. Nomura, M. Miyao and M. Hagino, A thermal desorption analysis for the adsorption of CO_2 on GaAs photocathodes 285 (1993) 188
S. Ferrer, Phase information in the crystal truncation rods 286 (1993) L564
D. Troost, H.J. Clemens, L. Koenders and W. Mönch, Electron-stimulated desorption and adsorption sites of chlorine on GaAs(110) surfaces 286 (1993) 97
V. Bressler-Hill, R. Maboudian, M. Wassermeier, X.-S. Wang, K. Pond, P.M. Petroff and W.H. Weinberg, Surface morphology of MBE-grown GaAs(001)-(2×4) and GaAs(001)-faceted surfaces investigated by scanning tunneling microscopy 287/288 (1993) 514
V. De Renzi, M.G. Betti and C. Mariani, Electronic and dielectric properties of Bi grown on GaAs(110) 287/288 (1993) 550
O. Pankratov and M. Scheffler, Electron correlations on a potassium-covered GaAs(110) surface: ab-initio calculations of the Hubbard correlation energy 287/288 (1993) 584
K. Hingerl, D.E. Aspnes and I. Kamiya, Comparison of reflectance difference spectroscopy and surface photoabsorption used for the investigation of anisotropic surfaces 287/288 (1993) 686
M.W.J. Prins, D.L. Abraham and H. van Kempen, Photo-assisted tunneling at ferromagnet/semiconductor interfaces 287/288 (1993) 750
Ph. Ebert and K. Urban, Step smoothing and surface vacancy reactions on InP(110) and GaP(110) observed by scanning tunneling microscopy 287/288 (1993) 891
T. Ide, A. Yamashita and T. Mizutani, STM observation of growth interruption effect of MBE growth 287/288 (1993) 1013
Y. Ma, S. Lordi, P.K. Larsen and J.A. Eades, Quantitative analyses of RHEED patterns from MBE grown GaAs(001)-2×4 surfaces 289 (1993) 47

Gallium phosphide
Y. Nakai, K. Hattori, A. Okano, T. Taguchi, J. Kanasaki and N. Itoh, Defect initiated particle emission from semiconductor surfaces by laser irradiation 283 (1993) 169

Gallium phosphide (continued)
M. Gajdardziska-Josifovska, M.R. McCartney and D.J. Smith, Reflection electron microscopy studies of GaP(110) surfaces in UHV-TEM 287/288 (1993) 1062

Germanium
P. Molinàs-Mata and J. Zegenhagen, Defects of Ge(111)-c(2×8) – structural and electronic characterization 281 (1993) 10
Y. Yamamoto, RHEED–TRAXS study of superstructures induced by Ge and Sn adsorption on a Si(110) surface 281 (1993) 253
T.T. Tran, S. Thevuthasan, Y.J. Kim, D.J. Friedman, A.P. Kaduwela, G.S. Herman and C.S. Fadley, Photoelectron diffraction and photoelectron holography study of a Ge(111) high-temperature surface phase transition 281 (1993) 270
K. Fukutani, Promotion of epitaxial growth of Ge by Ag and Pb deposited on a clean Ge(111) surface 281 (1993) 285
S. Surnev, Interaction of oxygen with a Ge-covered Si(100) surface 282 (1993) 10
W. Bock, H. Gnaser and H. Oechsner, Modification of crystalline semiconductor surfaces by low-energy Ar^+ bombardment: Si(111) and Ge(100) 282 (1993) 333
K. Sugiyama, Y. Igari and I. Kusunoki, A molecular beam study of desorption kinetics of GeO from Ge(111) surfaces 283 (1993) 64
S. Ino, T. Yamanaka and S. Ito, Epitaxial growth of metals on Si and Ge investigated by RHEED-TRAXS and UHV-SEM 283 (1993) 319
M. Horn-von Hoegen, M. Pook, A. Al Falou, B.H. Müller and M. Henzler, The interplay of surface morphology and strain relief in surfactant mediated growth of Ge on Si(111) 284 (1993) 53
N. Ohtani, S.M. Mokler, M.H. Xie, J. Zhang and B.A. Joyce, RHEED investigation of Ge surface segregation during gas source MBE of $Si/Si_{1-x}Ge_x$ heterostructures 284 (1993) 305
M.K. Kelly, S. Zollner and M. Cardona, Modelling the optical response of surfaces measured by spectroscopic ellipsometry: application to Si and Ge 285 (1993) 282
J. Wintterlin and Ph. Avouris, Hydrogen effects in CVD: selective etching and metastable phases 286 (1993) L529
A.C. Dillon, M.B. Robinson, S.M. George and D.A. Roberts, Adsorption and decomposition of diethylgermane on porous silicon surfaces 286 (1993) L535
S. Ferrer, Phase information in the crystal truncation rods 286 (1993) L564
C.A. Lucas, G.C.L. Wong, C.S. Dower, F.J. Lamelas and P.H. Fuoss, Initial stages in the epitaxial growth of NaCl on Ge(001) 286 (1993) 46
N. Takeuchi, A. Selloni and E. Tosatti, First principles calculations of the cleaved and annealed Ge(111) surfaces 287/288 (1993) 303
K. Newstead, A.W. Robinson, S. d'Addato, A. Patchett, N.P. Prince, R. McGrath, R. Whittle, E. Dudzik and I.T. McGovern, An X-ray absorption fine structure study of Ge(001)(2×1)–S 287/288 (1993) 317
R. Haight and M. Baeumler, Ultrafast electron dynamics at the Ge(111) surface investigated with subpicosecond laser photoemission 287/288 (1993) 482
L. Kipp, C. Sellmer, R. Manzke and M. Skibowski, Unoccupied electronic states of Ge(001)2×1 by constant initial band photoemission 287/288 (1993) 520
G. Le Lay, R.L. Johnson, R. Seemann, F. Grey, R. Feidenhans'l and M. Nielsen, Electronic and crystallographic structures of 2D silver adlayers on Ge(111) 287/288 (1993) 539
L. Seehofer, G. Falkenberg and R.L. Johnson, STM study of the structure and phases of Pb on Ge(111) 290 (1993) 15

Glass
M. Kubota, Superfluidity of thin ^{4}He films adsorbed on well-difined porous glasses 283 (1993) 404

Gold

K. Töglhofer, F. Aumayr and HP. Winter, Ion-induced electron emission from metal surfaces – insights from the emission statistics 281 (1993) 143
J.M. Doña and J. González-Velasco, Erratum to "The dependence of the surface diffusion coefficients of gold atoms on the potential: its influence on reconstruction of metal lattices" [Surface Science 274 (1992) 205] 282 (1993) 202
W.S. Fann, R. Storz, H.W.K. Tom and J. Bokor, Direct measurement of nonequilibrium electron-energy distributions in sub-picosecond laser-heated gold films 283 (1993) 221
D.L. Abernathy, D. Gibbs, G. Grübel, K.G. Huang, S.G.J. Mochrie, A.R. Sandy and D.M. Zehner, Reconstruction of the (111) and (001) surfaces of Au and Pt: thermal behavior 283 (1993) 260
K. Yagi, A. Yamanaka and H. Yamaguchi, Surface electromigration of metals on Si surfaces studied by UHV-REM 283 (1993) 300
M. Sasaki, J. Yuhara, M. Inoue and K. Morita, Studies on 2D Au–Cu binary adsorbates on Si(111) surfaces by means of combined LEED/AES/RBS techniques 283 (1993) 327
S. Hasegawa and S. Ino, Surface structures and conductance at initial stages in epitaxy of metals on a Si(111) surface 283 (1993) 438
N. Wang, Y. Uchida and G. Lehmpfuhl, REM study of Au(100) reconstructed surfaces 284 (1993) L419
A.R. Sandy, S.G.J. Mochrie, D.M. Zehner, G. Grübel, K.G. Huang and D. Gibbs, Au(111) and Pt(111) surface phase behavior 287/288 (1993) 321
M.O. Schweitzer, T.S. Jones, C.F. McConville and N.V. Richardson, The deposition of a thin Au film on InSb(100) 287/288 (1993) 545
A. Neumann, K. Christmann and T. Solomun, Binding states and structural phase transformations upon iodine adsorption on a gold (100) surface 287/288 (1993) 593
J.D. O'Mahony, J.F. McGilp, M.H.W. Verbruggen and C.F.J. Flipse, Au structures on Si(111) studied by spectroscopic ellipsometry and optical second harmonic generation 287/288 (1993) 713
G. Spierings, V. Koutsos, H.A. Wierenga, M.W.J. Prins, D.L. Abraham and Th. Rasing, Optical second harmonic generation study of interface magnetism 287/288 (1993) 747
G. Grübel, D. Gibbs, D.M. Zehner, D.L. Abernathy, A.R. Sandy and S.G.J. Mochrie, Phase behavior of Au and Pt surfaces 287/288 (1993) 842
H. Zimmermann, M. Nold, U. Romahn, H. Göbel, P. von Blanckenhagen and W. Schommers, Steps, point defects and thermal expansion at the Au(110) surface 287/288 (1993) 876
L. Barbier, B. Salanon, J. Sprösser and J. Lapujoulade, Growth and ordering dynamics for Au deposition on Au(110)(2×1) 287/288 (1993) 930
D. Rouyer, C. Krembel, M.C. Hanf, D. Bolmont and G. Gewinner, X-ray photoelectron diffraction from ultra-thin Cr layers on Au(100) and Ag(100): a comparison 287/288 (1993) 935
S. Rousset, S. Chiang, D.E. Fowler and D.D. Chambliss, Epitaxial growth of Au on Ag(110) studied by scanning tunneling microscopy 287/288 (1993) 941
D. Naumović, J. Osterwalder, A. Stuck, P. Aebi and L. Schlapbach, Growth of Au on Cu(001) studied by full hemispherical photoelectron diffraction 287/288 (1993) 950
S. Poulston, M. Tikhov and R.M. Lambert, Oxygen chemisorption on lead and gold precovered Ru(100) surfaces 287/288 (1993) 969
S. Nakanishi, K. Kawamoto and K. Umezawa, The initial stages of deposition of Au and Ag on Cu(001) studied by low-energy ion scattering 287/288 (1993) 974
K. Marre and H. Neddermeyer, Growth of ordered thin films of NiO on Ag(100) and Au(111) 287/288 (1993) 995

Gold (continued)
O. Tomagnini, F. Ercolessi and E. Tosatti, Microscopic interaction between a gold tip and a Pb(110) surface 287/288 (1993) 1041
O.M. Magnussen, J. Wiechers and R.J. Behm, In situ scanning tunneling microscopy observations of the potential-dependent (1×2) reconstruction on Au(110) in acidic electrolytes 289 (1993) 139
D.W. Suggs and J.L. Stickney, Studies of the structures formed by the alternated electrodeposition of atomic layers of Cd and Te on the low-index planes of Au. I. LEED and Auger studies 290 (1993) 362
D.W. Suggs and J.L. Stickney, Studies of the surface structures formed by the alternated electrodeposition of Cd and Te on the low-index planes of Au. II. STM studies 290 (1993) 375

Graphite
G. Watel, F. Thibaudau and J. Cousty, Direct observation of long chain alkane bilayer films on graphite by scanning tunneling microscopy 281 (1993) L297
F. Thibaudau, G. Watel and J. Cousty, Scanning tunneling microscopy imaging of alkane bilayers adsorbed on graphite: mechanism of contrast 281 (1993) L303
W. Choi, C. Kim and H. Kang, Interactions of low energy (10–600 eV) noble gas ions with a graphite surface: surface penetration, trapping and self-sputtering behaviors 281 (1993) 323
D. Marton, K.J. Boyd, T.E. Lytle and J.W. Rabalais, Auger electron spectroscopy of krypton subplanted in graphite 282 (1993) 113
K.G. Nakamura and M. Kitajima, Time-resolved Raman measurements of a graphite surface under ion irradiation 283 (1993) 255
E. Vives and P.-A. Lindgård, Theory and Monte Carlo simulation of adsorbates on corrugated surfaces 284 (1993) L449
H.-X. You, N.M.D. Brown and K.F. Al-Assadi, Radio-frequency (RF) plasma etching of graphite with oxygen: a scanning tunneling microscope study 284 (1993) 263
K.M. Hock and R.E. Palmer, Temperature dependent behaviour in the adsorption of submonolayer potassium on graphite 284 (1993) 349
E.A. Eklund, E.J. Snyder and R.S. Williams, Correlation from randomness: quantitative analysis of ion-etched graphite surfaces using the scanning tunneling microscope 285 (1993) 157
H. Asada, S. Doi and H. Kawano, The phase of condensate coexisting with the solid phase of nitrogen on Grafoil, studied by volumetric adsorption measurements of nitrogen 286 (1993) L554
H. Yu, J. Yan, Y. Li, W.S. Yang, Z. Gu and Y. Wu, Scanning tunneling microscopy of C_{60} on graphite 286 (1993) 116
J.C. Barnard, K.M. Hock and R.E. Palmer, Intercalation of potassium from the surface of graphite 287/288 (1993) 178
D.V. Chakarov, P. Sjövall and B. Kasemo, Vibrational spectra of KO_x complexes on graphite 287/288 (1993) 278
H. Yamazaki and A. Uchiyama, Graphite formation on natural diamond (111) surfaces by electron irradiation and heat treatment 287/288 (1993) 308
A. Nagashima, K. Nuka, K. Satoh, H. Itoh, T. Ichinokawa, C. Oshima and S. Otani, Electronic structure of monolayer graphite on some transition metal carbide surfaces 287/288 (1993) 609
A. Nilsson, O. Björneholm, H. Tillborg, B. Hernnäs, R.J. Guest, A. Sandell, R.E. Palmer and N. Mårtensson, Core level spectroscopy of physisorbed molecules on graphite 287/288 (1993) 758

Graphite (continued)
T. Kosugi, Y. Usui and I. Arakawa, Adsorption/desorption hysteresis in the adsorption isotherms for Kr and Xe on exfoliated graphite 287/288 (1993) 862
S. Di Nardo, L. Lozzi, M. Passacantando, P. Picozzi, S. Santucci and M. De Crescenzi, Extended fine Auger structure investigation of discontinuous copper films deposited on graphite 287/288 (1993) 1087
J.-P. Bucher, H. Roeder and K. Kern, Thermally induced disorder and conformational defects of alkane monolayers on graphite 289 (1993) 370
P. Sjövall and B. Kasemo, A TDS study of oxygen, water and carbon dioxide coadsorption with potassium on graphite 290 (1993) 55

Halides
T. Niwa, M. Sugiyama, T. Nakahata, O. Sakata and H. Hashizume, Structure of fluoride/GaAs(111) heteroepitaxial interfaces 282 (1993) 342
J. Lin, A.T.S. Wee, A.C.H. Huan and K.L. Tan, SIMS study of the formic acid adsorption on polycrystalline copper and CuCl(111) surfaces 285 (1993) 31
S.N. Schauer, R. Thomas and P. Williams, Energy distributions of ions produced by electron-stimulated desorption 290 (1993) 277

Halogens
C.J. Barnes, A. Wander and D.A. King, A tensor LEED structural study of the coverage-dependent bonding of iodine adsorbed on Rh{111} 281 (1993) 33
C. Su, M. Xi, Z.-G. Dai, M.F. Vernon and B.E. Bent, Dry etching of GaAs with Cl_2: correlation between the surface Cl coverage and the etching rate at steady state 282 (1993) 357
J. Matsuo, F. Yannick and K. Karahashi, Reaction kinetics of chlorine on Si(111)7×7 surfaces 283 (1993) 52
T.N. Rhodin, C. Paulsen-Boaz and W.L. O'Brien, Dynamics of pulsed ultraviolet laser enhancement of the chlorine–Si(111) reaction 283 (1993) 109
Kai Wu, Dezheng Wang, Xuming Wei, Yuming Cao and Xiexian Guo, An anomalous adsorption curve: Cl on Ag(111) 285 (1993) L522
D. Troost, H.J. Clemens, L. Koenders and W. Mönch, Electron-stimulated desorption and adsorption sites of chlorine on GaAs(110) surfaces 286 (1993) 97
C.L.A. Lamont, H. Conrad and A.M. Bradshaw, The photodissociation of methyl bromide chemisorbed on Cu{111}: influence of pre-adsorbed bromine 287/288 (1993) 169
S. Zhuang, M. Ji, J. Wu, X. Liu, J. Tu and K. Wandelt, The adsorption of chlorine on an $Fe_{64}Ni_{36}$(100) surface 287/288 (1993) 260
A. Neumann, K. Christmann and T. Solomun, Binding states and structural phase transformations upon iodine adsorption on a gold (100) surface 287/288 (1993) 593
J. Prasad, E. Murray and J.A. Kelber, Site selective chemistry of S, Cl and H_2O at the iron oxide surface 289 (1993) 10
B.I. Craig and P.V. Smith, Monolayer chemisorption of HCl and Cl_2 on the Si(001)2×1 surface 290 (1993) L662
H.T. Liu and Z. Wu, The role of secondary electrons in electron-assisted adsorption process 290 (1993) L685
S.L. Bennett, C.L. Greenwood and E.M. Williams, ESDIAD studies of fluorine and chlorine adsorption at Si(100) 290 (1993) 267

Heterostructures
N. Ohtani, S.M. Mokler, M.H. Xie, J. Zhang and B.A. Joyce, RHEED investigation of Ge surface segregation during gas source MBE of $Si/Si_{1-x}Ge_x$ heterostructures 284 (1993) 305

Hydrogen

K.-I. Fukui, T. Aruga and Y. Iwasawa, Chemisorption of CO and H_2 on clean and oxygen-modified Mo(112) 281 (1993) 241
X.M. Zheng and P.V. Smith, Hydrogen chemisorption on the Si(111) surface 282 (1993) 173
B. Sieben and H.P. Bonzel, Adsorption of H_2 and CO on Mn/Fe(110) surfaces 282 (1993) 246
D.J. Auerbach, C.T. Rettner and H.A. Michelsen, Interaction dynamics of hydrogen at a Cu(111) surface 283 (1993) 1
U. van Slooten, E.J.J. Kirchner and A.W. Kleyn, Classical trajectory study of fast H_2 scattering from Ag(111) 283 (1993) 27
H. He, J. Nakamura and K. Tanaka, Formation of CH_x species on a Ni(100) surface by the hydrogenation of carbidic carbon 283 (1993) 117
K. Ueda, S. Kodama and A. Takano, Desorption study of a proton from H/Si(100) by electron stimulated desorption spectroscopy 283 (1993) 195
H. Onishi, T. Aruga and Y. Iwasawa, An unusual adsorption state of hydrogen on the Pd(100)-p(2×2)-p4g-Al bimetallic surface 283 (1993) 213
M. Maruyama, M. Bienfait, F.C. Liu, O.E. Vilches and F. Rieutord, Quasi-liquid molecular layer at solid hydrogen surfaces 283 (1993) 333
Y. Aiura, H. Yanashima, H. Fukutani, H. Kato, Y. Sakisaka, T. Maruyama and K. Edamoto, Hydrogen-induced reconstruction of a W(110) surface studied by angle-resolved photoemission spectroscopy 283 (1993) 344
U. Albrecht, P. Evers and P. Leiderer, Annealing behavior of quench-condensed hydrogen and deuterium films 283 (1993) 419
U. Albrecht, P. Leiderer and K. Kono, Surface state electrons on quench-condensed hydrogen films as a surface probe 283 (1993) 423
K. Fukutani, M. Tsunoda, Y. Murata, H. Yamashita, K. Komaki and K. Kobayashi, High-resolution depth analysis of hydrogen by a resonance nuclear reaction: a-Si/H/Si(001) 283 (1993) 447
A. Ishii and Y. Murata, Theory of adsorbate-sensitive positronium formation and its application to ion desorption 283 (1993) 462
H. Müller, R. Hausmann, H. Brenten and V. Kempter, Electrons from intra- and interatomic Auger processes in low-energy grazing collisions of H^+ and H_2^+ with W(110) partially covered by alkali atoms 284 (1993) 129
V. Lossev and J. Küppers, Adsorption of hydrogen on Be(0001) surfaces 284 (1993) 175
K. Jacobi and U. Myler, Chemisorption of H, H_2O and C_2H_4 on Si(113): implications for the structure 284 (1993) 223
B.I. Craig, A theoretical examination of the electron localisation within a small hydrogen covered silicon outcrop on Si(001) 285 (1993) L486
K. Gundersen, B. Hammer, K.W. Jacobsen, J.K. Nørskov, J.S. Lin and V. Milman, Chemisorption and vibration of hydrogen on Cu(111) 285 (1993) 27
K.B. Ray, X. Pan and E.W. Plummer, The interaction of H with Be(0001): a photoemission investigation 285 (1993) 66
B.A. Chuikov, V.V. Dvurechenskikh, V.D. Osovskii, Yu.G. Ptushinskii and V.G. Sukretnyi, Adsorption of H_2 and D_2 on W(111) and W(110) surfaces at low temperatures (down to 5 K) 285 (1993) 75
I.G. Medvedev, Exact calculations of the ground state properties of hydrogen chemisorbed on a transition metal with one electron or hole in the energy band for the Anderson–Newns model 285 (1993) 117
P. Badziag and W.S. Verwoerd, Quantum chemical modeling of the scanning tunneling microscope 285 (1993) 145
P. Jakob, Y.J. Chabal, K. Raghavachari, P. Dumas and S.B. Christman, Imperfections on the chemically prepared, ideally H-terminated Si(111)-(1×1) surfaces 285 (1993) 251

Hydrogen (continued)
A.M. Glines and A.B. Anton, Effects of the hydrogen-induced (1×2) surface reconstruction on the kinetics of ethylene hydrogenation on Ni(110) 286 (1993) 122
Y.B. Zhao, J.E. Whitten and R. Gomer, Electron stimulated desorption of hydrogen from W(110) 286 (1993) 290
K.-H. Allers, H. Pfnür, P. Feulner and D. Menzel, Associative desorption of HD and D_2 from a Ni(100) surface: angular and velocity distributions 286 (1993) 297
H. Kondoh, M. Hara, K. Domen and H. Nozoye, Adsorption of hydrogen on Al(111) and Al(110): coverage and temperature dependence of adsorption states 287/288 (1993) 74
P.B. Rasmussen, P.M. Holmblad, H. Christoffersen, P.A. Taylor and I. Chorkendorff, Dissociative adsorption of hydrogen on Cu(100) at low temperatures 287/288 (1993) 79
L. Hammer, W. Nichtl-Pecher, N. Elbel, W. Stammler, K. Heinz and K. Müller, Phase diagram for hydrogen adsorption on Rh(311) 287/288 (1993) 84
D. Hennig, S. Wilke, R. Löber and M. Methfessel, The adsorption of hydrogen on Pd(100) and Rh(100) surfaces: a comparative theoretical study 287/288 (1993) 89
U. Schneider, G.R. Castro and K. Wandelt, Adsorption on ordered $Cu_3Pt(111)$: site selectivity 287/288 (1993) 146
G. Ghiotti, A. Chiorino and F. Boccuzzi, Surface chemistry and electronic effects of H_2 (D_2) on two different microcrystalline ZnO powders 287/288 (1993) 228
J. Radnik, F. Gitmans, B. Pennemann, K. Oster and K. Wandelt, Adsorbate-induced structure transitions at the reconstructed Pt(100) surface 287/288 (1993) 330
J.C. Bertolini, J.L. Rousset, P. Miegge, J. Massardier and B. Tardy, On the large Pd surface segregation and reactivity of Pd_1Fe_{99} and Pd_5Fe_{95} dilute alloys 287/288 (1993) 346
K. Ueda and A. Takano, Hydrogen termination study of silicon dangling bonds by electron stimulated desorption spectroscopy (TOF-ESD) 287/288 (1993) 506
E. Hulpke and J. Lüdecke, The giant surface phonon anomaly on hydrogen saturated W(110) and Mo(110) 287/288 (1993) 837
T. Uchikoshi, Y. Sakka, S. Ohno, H. Okuyama and K. Yoshihara, Adsorption of hydrogen on Ni and Ni–TiO_2 composite ultrafine particles 287/288 (1993) 1082
E. Shustorovich and A.T. Bell, Decomposition and reduction of NO on transition metal surfaces: bond order conservation Morse potential analysis 289 (1993) 127
G. Gross and K.H. Rieder, Revisiting the iterative procedure for atomic beam diffraction analyses: improvements, caveats and first application to a 2D adsorption structure 289 (1993) 180
A. Vittadini, A. Selloni and M. Casarin, Energetics of atomic hydrogen diffusion on Si(100) 289 (1993) L625
J. Goerge, P. Zeppenfeld, R. David, M. Büchel and G. Comsa, Structure of the hydrogen covered Cu(110) surface studied with thermal energy helium scattering 289 (1993) 201
J.A. Prybyla and P.J. Estrup, The effect of surface reconstruction on desorption: H/Mo(100) 290 (1993) 413
Y. Okuno, M. Kuwahara, M. Fukui and Y. Shintani, The effects of residual gases on optical constants of Al films 290 (1993) 421

Ice
U. Starke, N. Materer, A. Barbieri, R. Döll, K. Heinz, M.A. Van Hove and G.A. Somorjai, A low-energy electron diffraction study of oxygen, water and ice adsorption on Pt(111) 287/288 (1993) 432

Indium
K. Yagi, A. Yamanaka and H. Yamaguchi, Surface electromigration of metals on Si surfaces studied by UHV-REM 283 (1993) 300

Indium (continued)
S. Ino, T. Yamanaka and S. Ito, Epitaxial growth of metals on Si and Ge investigated by RHEED-TRAXS and UHV-SEM 283 (1993) 319
G. Krausch, R. Fink, K. Jacobs, B. Luckscheiter, J. Lohmüller, B.-U. Runge, U. Wöhrmann and G. Schatz, Indium adsorption on silicon surfaces: a PAC study 285 (1993) 81
S. Kono, N. Nakamura, K. Anno and S. Teruyama, Study of solid surfaces using micro-electron-beams 287/288 (1993) 1092

Indium antimonide
V.Yu. Aristov, M. Bertolo, P. Althainz and K. Jacobi, The Ag/n-InSb(110) interface at 10 K: first observation of an anomalous Fermi-level pinning 281 (1993) 74
M.O. Schweitzer, T.S. Jones, C.F. McConville and N.V. Richardson, The deposition of a thin Au film on InSb(100) 287/288 (1993) 545

Indium arsenide
J.W. Erickson, W.M. Theis, T. Cole, A.K. Green and V. Rehn, Erratum to "A photoemission study of coherently strained In_xGa_{1-x}/InP(100)" [Surface Science 274 (1992) 363] 281 (1993) 220

Indium phosphide
D.G. Li, N.S. McAlpine and D. Haneman, Surface barriers and potentials from luminescence on cleaved Si, GaAs, and InP 281 (1993) L315
J.W. Erickson, W.M. Theis, T. Cole, A.K. Green and V. Rehn, Erratum to "A photoemission study of coherently strained In_xGa_{1-x}/InP(100)" [Surface Science 274 (1992) 363] 281 (1993) 220
P.S. Mangat, S.T. Kim, K.M. Choudhary, Z. Hurych and P. Soukiassian, Polarization-dependent photoemission EXAFS investigation of the InP(110) surface structure 285 (1993) 102
R. Whittle, E. Dudzik, I.T. McGovern, D.R.T. Zahn, C. Nowak, A. Cafolla and W. Braun, Surface electronic structure of monolayer Bi on InP(110) 287/288 (1993) 554
Ph. Ebert and K. Urban, Step smoothing and surface vacancy reactions on InP(110) and GaP(110) observed by scanning tunneling microscopy 287/288 (1993) 891
S. Valeri and A. di Bona, P LVV Auger lineshape modulation by incident beam diffraction in InP 289 (1993) L617

Infrared spectroscopy
J. Fan and M. Trenary, The influence of coadsorbates on the overlayer structure of PF_3 on Pt(111) 282 (1993) 76
S. Kittaka, T. Sasaki, N. Fukuhara and H. Kato, Fourier transform infrared spectroscopy of H_2O molecules on the Cr_2O_3 surface 282 (1993) 255
S. Sato and Y. Ukisu, Mechanism of the photolysis of iron pentacarbonyl adsorbed on a Pt surface 283 (1993) 137
R.R. Cavanagh, E.J. Heilweil and J.C. Stephenson, Time-resolved probes of surface dynamics 283 (1993) 226
H. Kasai and A. Okiji, Molecular vibration dynamics in molecule–surface interactions: subpicosecond transient infrared spectroscopy 283 (1993) 233
C. Hirose, Y. Goto, N. Akamatsu, J. Kondo and K. Domen, Measurement of vibrational energy relaxation of a surface hydroxyl group by ultrashort tunable infrared pulses 283 (1993) 244
M. Nakamura, H. Ogasawara, J. Inukai and M. Ito, CO migration on Pt(100) and Pt(11 1 1) surfaces studied by time resolved infrared reflection–adsorption spectroscopy 283 (1993) 248

Infrared spectroscopy (continued)
X. Xu, J.-W. He and D.W. Goodman, A surface spectroscopic study of metal–support interactions: model studies of copper on thin SiO_2 films 284 (1993) 103
D.H. Fairbrother, X.D. Peng, R. Viswanathan, P.C. Stair, M. Trenary and J. Fan, Carbon–carbon coupling of methyl groups on Pt(111) 285 (1993) L455
P. Jakob, Y.J. Chabal, K. Raghavachari, P. Dumas and S.B. Christman, Imperfections on the chemically prepared, ideally H-terminated Si(111)-(1×1) surfaces 285 (1993) 251
A.C. Dillon, M.B. Robinson, S.M. George and D.A. Roberts, Adsorption and decomposition of diethylgermane on porous silicon surfaces 286 (1993) L535
R.K. Brandt, M.R. Hughes, L.P. Bourget, K. Truszkowska and R.G. Greenler, The interpretation of CO adsorbed on Pt/SiO_2 of two different particle-size distributions 286 (1993) 15
M. Tüshaus, P. Gardner and A.M. Bradshaw, A high resolution vibrational spectroscopic study of CO/K coadsorption on Pt{111} 286 (1993) 212
P. Gardner, R. Martin, M. Tüshaus, J. Shamir and A.M. Bradshaw, The structure-sensitive adsorption of N_2 on the (1×1) and (5×1) surfaces of Ir{100} 287/288 (1993) 135
G. Ghiotti, A. Chiorino and F. Boccuzzi, Surface chemistry and electronic effects of H_2 (D_2) on two different microcrystalline ZnO powders 287/288 (1993) 228
R. Raval, S.F. Parker and M.A. Chesters, C–H· · ·M interactions and orientational changes of cyclohexane on Cu(111): a RAIRS, EELS and LEED study 289 (1993) 227
H.E. Dastoor, P. Gardner and D.A. King, The coadsorption of ammonia and oxygen on Ni{110}: a RAIRS study 289 (1993) 279
E. Knözinger, K.-H. Jacob, S. Singh and P. Hofmann, Hydroxyl groups as IR active surface probes on MgO crystallites 290 (1993) 388

Inorganic compounds
I. Abbati, C. Mariani, C. Chemelli and M. Scagliotti, Vibrational and electronic properties of $FePS_3$ studied by HREELS and EELS 281 (1993) 127
J. Fan and M. Trenary, The influence of coadsorbates on the overlayer structure of PF_3 on Pt(111) 282 (1993) 76
S.C. Park, C.H. Cho and C.H. Rhee, Theoretical studies of polyatomic reactions on metal surfaces: Al + $SiCl_4$ and Cu + $SiCl_4$ model systems 283 (1993) 70
J.C.S. Chu, Y. Bu and M.C. Lin, Spectroscopy and reactions of hydrazoic acid on silicon single crystal surfaces. III. HN_3 and DN_3 on Si(111)(7×7) 284 (1993) 281
A. Klekamp and E. Umbach, Physisorption on an epitaxial NaCl(100) double-layer: SF_6 and xenon 284 (1993) 291
R. Lüthi, H. Haefke, P. Grütter, H.-J. Güntherodt, L. Szcześniak and K.P. Meyer, Surface and domain structures of ferroelectric GASH crystals studied by scanning force microscopy 285 (1993) L498
M. Lindblad and T.A. Pakkanen, Cluster models for the interaction of HCl with non-polar surfaces of γ-Al_2O_3 286 (1993) 333
R. Dippel, K.-U. Weiss, K.-M. Schindler, D.P. Woodruff, P. Gardner, V. Fritzsche, A.M. Bradshaw and M.C. Asensio, Multiple site coincidences and their resolution in photoelectron diffraction: PF_3 adsorbed on Ni(111) 287/288 (1993) 465
H. Shindo and H. Nozoye, Atomic force microscopic study of structures of cleaved surfaces of $CaSO_4$ after wet chemical etching 287/288 (1993) 1030
B.I. Craig and P.V. Smith, Monolayer chemisorption of HCl and Cl_2 on the Si(001)2×1 surface 290 (1993) L662
S.X. Huang, T.S. Rufael and J.L. Gland, Diimide formation on the Ni(100) surface 290 (1993) L673
K. Prabhakaran, Y. Kobayashi and T. Ogino, Chemically prepared oxides on Si(001): an XPS study 290 (1993) 239

Iodine, see Halogens

Ion bombardment

K. Töglhofer, F. Aumayr and HP. Winter, Ion-induced electron emission from metal surfaces – insights from the emission statistics 281 (1993) 143

W. Choi, C. Kim and H. Kang, Interactions of low energy (10–600 eV) noble gas ions with a graphite surface: surface penetration, trapping and self-sputtering behaviors 281 (1993) 323

W. Bock, H. Gnaser and H. Oechsner, Modification of crystalline semiconductor surfaces by low-energy Ar^+ bombardment: Si(111) and Ge(100) 282 (1993) 333

E.A. Eklund, E.J. Snyder and R.S. Williams, Correlation from randomness: quantitative analysis of ion-etched graphite surfaces using the scanning tunneling microscope 285 (1993) 157

Ion implantation

W. Choi, C. Kim and H. Kang, Interactions of low energy (10–600 eV) noble gas ions with a graphite surface: surface penetration, trapping and self-sputtering behaviors 281 (1993) 323

D. Marton, K.J. Boyd, T.E. Lytle and J.W. Rabalais, Auger electron spectroscopy of krypton subplanted in graphite 282 (1993) 113

Ion scattering

J.C. Bertolini, J.L. Rousset, P. Miegge, J. Massardier, B. Tardy, Y. Samson, B.C. Khanra and C. Creemers, Surface segregation study of a dilute Pd_1Fe_{99} alloy by LEIS and XPS 281 (1993) 102

M.R. Davidson, G.B. Hoflund and R.A. Outlaw, Electron stimulated desorption of oxygen atoms and ions from an oxidized Ag–Zr alloy surface 281 (1993) 111

T.T. Tran, S. Thevuthasan, Y.J. Kim, D.J. Friedman, A.P. Kaduwela, G.S. Herman and C.S. Fadley, Photoelectron diffraction and photoelectron holography study of a Ge(111) high-temperature surface phase transition 281 (1993) 270

Y. Serruys, T. Sakout and D. Gorse, Anodic oxidation of titanium in 1M H_2SO_4, studied by Rutherford backscattering 282 (1993) 279

R. Souda, W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Chemical effects on dynamical charge transfer: D^+ on K-adsorbed Pt(111), Si(100) and Si(111) surfaces 283 (1993) 36

M. Okada and Y. Murata, Scattering of very-low-energy D_2^+ ions from an Al(111) surface: neutralization and dissociation 283 (1993) 41

M. Nakamura, M. Tsukada and M. Aono, Interaction of low-velocity rare-gas ions with a solid surface 283 (1993) 46

K.H. Park, B.C. Kim and H. Kang, Kinetic energy dependence of N^+ and N_2^+ reactions with Si(100) 283 (1993) 73

H. Sakai, Y.H. Ohtsuki and M. Kitagawa, Calculation of the dynamical image potential at metal surfaces 283 (1993) 84

J.W.M. Frenken, H.M. van Pinxteren and L. Kuipers, New views on surface melting obtained with STM and ion scattering 283 (1993) 283

M. Sasaki, J. Yuhara, M. Inoue and K. Morita, Studies on 2D Au–Cu binary adsorbates on Si(111) surfaces by means of combined LEED/AES/RBS techniques 283 (1993) 327

K. Fukutani, M. Tsunoda, Y. Murata, H. Yamashita, K. Komaki and K. Kobayashi, High-resolution depth analysis of hydrogen by a resonance nuclear reaction: a-Si/H/Si(001) 283 (1993) 447

Ion scattering (continued)
J.B. Zhou, T. Gustafsson, R.F. Lin and E. Garfunkel, Medium energy ion scattering study of Ni on ultrathin films of SiO_2 on Si(111) 284 (1993) 67
H. Müller, R. Hausmann, H. Brenten and V. Kempter, Electrons from intra- and interatomic Auger processes in low-energy grazing collisions of H^+ and H_2^+ with W(110) partially covered by alkali atoms 284 (1993) 129
Kai Wu, Dezheng Wang, Xuming Wei, Yuming Cao and Xiexian Guo, An anomalous adsorption curve: Cl on Ag(111) 285 (1993) L522
R. Souda, W. Hayami, T. Aizawa and Y. Ishizawa, Low energy D^+ scattering from clean and alkalated TiO_2(110) surfaces 285 (1993) 265
H. Hirayama, Low energy H_3^+ molecular ion scattering from the Si(100) surface 287/288 (1993) 12
T. Hashimoto, J. Murakami and I. Kusunoki, Low-energy Ne^+ bombardment on O-adsorbed Be surfaces 287/288 (1993) 46
W. Soszka, Impact collision ion scattering spectroscopy at large incidence angles as a method for studying rare-gas adsorption 287/288 (1993) 69
G.W.R. Leibbrandt, L.H. Spiekman and F.H.P.M. Habraken, Plane-specific oxide stoichiometries on Fe single-crystal surfaces 287/288 (1993) 250
P.C. Görts, B.H.P. Dorren and F.H.P.M. Habraken, Oxidation of the Co(10$\bar{1}$0) surface 287/288 (1993) 255
J.C. Bertolini, J.L. Rousset, P. Miegge, J. Massardier and B. Tardy, On the large Pd surface segregation and reactivity of Pd_1Fe_{99} and Pd_5Fe_{95} dilute alloys 287/288 (1993) 346
P. Weigand, W. Hofer and P. Varga, Investigation of $Pt_{25}Ni_{75}$(111): preferential sputtering and surface segregation 287/288 (1993) 350
Y. Kadowaki, K. Aika, H. Kondoh and H. Nozoye, Surface structure of MoS_2(001) determined by coaxial impact-collision ion scattering spectroscopy (CACISS) 287/288 (1993) 396
D.J. O'Connor, E.R. Wouters, A.W. Denier van der Gon, J. Vrijmoeth, P.M. Zagwijn, W.F.J. Slijkerman, J.W.M. Frenken and J.F. van der Veen, Oxidation of Al(111) 287/288 (1993) 438
G. Dorenbos and D.O. Boerma, The structure of the Ag(110)-c(6×2)O surface determined with LEIS 287/288 (1993) 443
M. Breeman and D.O. Boerma, Atomic mobilities on a stepped Cu(100) surface 287/288 (1993) 881
U. Diebold, J.-M. Pan and T.E. Madey, Ultrathin metal films on TiO_2(110): metal overlayer spreading and surface reactivity 287/288 (1993) 896
S. Nakanishi, K. Kawamoto and K. Umezawa, The initial stages of deposition of Au and Ag on Cu(001) studied by low-energy ion scattering 287/288 (1993) 974
R. Zhang, A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1
H. Niehus and C. Achete, Surface structure investigation of nitrogen and oxygen on Cu_3Au(100) 289 (1993) 19
R.M. Charatan and R.S. Williams, Influence of triple scattering on impact collision ion scattering spectroscopy at 135° 289 (1993) 163
R. Harder, A. Nesbitt, J.-H. Rechtien, W. Mix, C. Röthig, M. Kato and K.J. Snowdon, Evidence for hot electron induced angular straggling of Ne beams scattered from Cu(111) 289 (1993) 214
R. Souda, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy D^+ scattering from Cs and CsCl adsorbed on the Si(100)2×1 surface 290 (1993) 245
J. Vrijmoeth, P.M. Zagwijn, E. Vlieg, J.W.M. Frenken and P.F.A. Alkemade, Structure determination of the $NiSi_2$(111) surface with medium-energy ion backscattering from individual monolayers 290 (1993) 255

Iridium
A. Tonscheidt, P.L. Ryder, N.I. Jaeger and G. Schulz-Ekloff, Orientation and morphology of iridium, rhodium and platinum nanocrystals in zeolite X 281 (1993) 51

Iridium (continued)
Y. Ohno, T. Matsushima and H. Miki, Anisotropy in the spatial distribution of reactive carbon dioxide desorption from narrow terraces on a reconstructed iridium (110)(1×2) surface 281 (1993) 234
P. Xu, D. Dunn, J.P. Zhang and L.D. Marks, Atomic imaging of surfaces in plan view 285 (1993) L479
Y. Bu, J.C.S. Chu and M.C. Lin, Thermal stability of trimethyl indium on Si(100)(2×1) as studied with HREELS, UPS and XPS: a comparison with the results from Si(111)(7×7) and Si(110) studies 285 (1993) 243
R.W. Verhoef, D. Kelly, C.B. Mullins and W.H. Weinberg, Isotope effects for the direct dissociative chemisorption of methane and ethane on Ir(110) and vibrationally assisted chemisorption 287/288 (1993) 94
P. Gardner, R. Martin, M. Tüshaus, J. Shamir and A.M. Bradshaw, The structure-sensitive adsorption of N_2 on the (1×1) and (5×1) surfaces of Ir{100} 287/288 (1993) 135
B. Piveteau, D. Spanjaard and M.C. Desjonquères, Relative stability of ternary adsorption sites on (111) fcc and (0001) hcp transition-metal surfaces 287/288 (1993) 946
D.A. Hutt and D.W. Bassett, Growth of Ir overlayers on a Mo(110) surface 287/288 (1993) 1000

Iron
M. Wuttig and J. Thomassen, Structure determination for Fe films on Cu(100) 282 (1993) 237
B. Sieben and H.P. Bonzel, Adsorption of H_2 and CO on Mn/Fe(110) surfaces 282 (1993) 246
C. Egawa, Y. Tezuka, S. Oki and Y. Murata, Structures of ultra-thin Fe overlayers on a Rh(001) surface 283 (1993) 338
M.M. Montagono and J. Cabané, Thermodynamics of sulphur adsorption on iron 285 (1993) L468
H. den Daas, O.L.J. Gijzeman and J.W. Geus, Oxidation of ultrathin iron layers on Cu(100). Composition of the oxide films 285 (1993) 15
G.W.R. Leibbrandt, L.H. Spiekman and F.H.P.M. Habraken, Temperature dependence of thin oxide film growth on Fe(110) 287/288 (1993) 245
G.W.R. Leibbrandt, L.H. Spiekman and F.H.P.M. Habraken, Plane-specific oxide stoichiometries on Fe single-crystal surfaces 287/288 (1993) 250
M. Finazzi, L. Duò, G. Bacchin, F. Ciccacci and E. Puppin, Ultraviolet inverse photoemission study of the oxidation of Fe, Co and Ni 287/288 (1993) 264
J. Alvarez, J.J. Hinarejos, E.G. Michel and R. Miranda, Determination of the Fe/Si(111) phase diagram by means of photoelectron spectroscopies 287/288 (1993) 490
M. Donath, Recent developments in surface and thin film magnetism probed by spin-polarized electrons 287/288 (1993) 722
O. Rader, C. Carbone, W. Clemens, E. Vescovo, S. Blügel, W. Eberhardt and W. Gudat, Growth and magnetic behavior of Pd on Fe(100) 287/288 (1993) 736
A. Brodde and H. Neddermeyer, Scanning tunneling microscopy on the growth of Fe films on Cu(100) 287/288 (1993) 988
G. Blyholder and M. Lawless, A theoretical study of the site of CO dissociation on Fe(100) 290 (1993) 155

Iron oxide
G. Tarrach, D. Bürgler, T. Schaub, R. Wiesendanger and H.-J. Güntherodt, Atomic surface structure of Fe_3O_4(001) in different preparation stages studied by scanning tunneling microscopy 285 (1993) 1
J. Prasad, E. Murray and J.A. Kelber, Site selective chemistry of S, Cl and H_2O at the iron oxide surface 289 (1993) 10
H. den Daas, O.L.J. Gijzeman and J.W. Geus, Low energy Auger electron spectroscopy of iron oxide: oxidation of one monolayer of iron on Cu(100) 290 (1993) 26

Lanthanides

P. Dubot, E. Alleno, M.-G. Barthés-Labrousse, C. Binns, C. Nicklin, C. Norris and D. Ravot, Electronic properties of low-dimensional Sm films adsorbed on Cr(211) and Cr(110) 282 (1993) 1

T. Almeida, L.E. Cox, J.W. Ward and J.R. Naegele, Gas adsorption studies on Pu metal by photoemission spectroscopy 287/288 (1993) 141

J.P. Warren, X. Zhang, J.E.T. Andersen and R.M. Lambert, Growth of Ce on Rh, surface alloy formation and the preparation and properties of Rh/ceria model planar catalysts 287/288 (1993) 222

Lead

K. Fukutani, Promotion of epitaxial growth of Ge by Ag and Pb deposited on a clean Ge(111) surface 281 (1993) 285

H. Nagayoshi, Theoretical study of the electronic structure of the Si(111)$\sqrt{3}\times\sqrt{3}$:Sb surface 282 (1993) 163

J.W.M. Frenken, H.M. van Pinxteren and L. Kuipers, New views on surface melting obtained with STM and ion scattering 283 (1993) 283

K. Fang, H.-N. Yang and G.-C. Wang, Modification of surface structures and roughening phase transition in Pb(110) by impurities 284 (1993) L399

A. Pavlovska, D. Dobrev and E. Bauer, Surface melting versus surface non-melting: an equilibrium shape study 286 (1993) 176

Wei Li and G. Vidali, Metal adatom induced corrugation of Cu(001) 287/288 (1993) 336

J.R. Power and J.F. McGilp, Resonance in the optical second harmonic response from the Si(111)–Sb interface 287/288 (1993) 708

O. Biham, L.-W. Chen and G. Vidali, Models for monolayers adsorbed on a square substrate 287/288 (1993) 815

T.I.M. Bootsma and T. Hibma, A strain-relieve transition in epitaxial growth of metals on Si(111)(7×7) 287/288 (1993) 921

M. Wemmenhove and T. Hibma, Structure and coverage of epitaxial Pb-layers on Si(111)(7×7) 287/288 (1993) 925

Wei Li and G. Vidali, Growth of metastable high-order commensurate overlayers of Pb on Cu(001) 287/288 (1993) 955

S. Poulston, M. Tikhov and R.M. Lambert, Oxygen chemisorption on lead and gold precovered Ru(100) surfaces 287/288 (1993) 969

O. Tomagnini, F. Ercolessi and E. Tosatti, Microscopic interaction between a gold tip and a Pb(110) surface 287/288 (1993) 1041

L. Seehofer, G. Falkenberg and R.L. Johnson, STM study of the structure and phases of Pb on Ge(111) 290 (1993) 15

Low energy electron diffraction

W. Liu, J.R. Lou and K.A.R. Mitchell, LEED crystallographic studies for the Rh(100)-p(2×2)-S and Rh(100)-c(2×2)-S surface structures 281 (1993) 21

C.J. Barnes, A. Wander and D.A. King, A tensor LEED structural study of the coverage-dependent bonding of iodine adsorbed on Rh{111} 281 (1993) 33

J.M. Bugnard, R. Baudoing-Savois, Y. Gauthier and E.K. Hill, The (110) surface of the disordered $Pt_{25}Co_{75}$ alloy: a sandwich of almost pure monoatomic layers 281 (1993) 62

A. Sellidj and B.E. Koel, Growth mechanism and structure of ultrathin Pd films vapor-deposited on Ta(110) 281 (1993) 223

K.-I. Fukui, T. Aruga and Y. Iwasawa, Chemisorption of CO and H_2 on clean and oxygen-modified Mo(112) 281 (1993) 241

R.S. Saiki, A.P. Kaduwela, M. Sagurton, J. Osterwalder, D.J. Friedman, C.S. Fadley and C.R. Brundle, X-ray photoelectron diffraction and low-energy electron

Low energy electron diffraction (continued)
diffraction study of the interaction of oxygen with the Ni(001) surface: c(2×2) to saturated oxide 282 (1993) 33
W.-D. Wang, N.J. Wu, P.A. Thiel and M.C. Tringides, Epitaxial growth in a strained system: Ni(100)–O(7×7) 282 (1993) 229
M. Wuttig and J. Thomassen, Structure determination for Fe films on Cu(100) 282 (1993) 237
W. Bock, H. Gnaser and H. Oechsner, Modification of crystalline semiconductor surfaces by low-energy Ar^+ bombardment: Si(111) and Ge(100) 282 (1993) 333
J.C. Le Bossé, G. Hansali, J. Lopez, G. Wiatrowski and I. Zasada, Site occupancy pair correlation functions and structure factors of partially ordered overlayers. II. Application to O/Ni(100) 282 (1993) 389
H. Namba, T. Yamaguchi and H. Kuroda, Chemisorption and photo-decomposition of $(CH_3)_2GeH_2$ adsorbed on Si(100) studied by UPS and LEED 283 (1993) 132
H. Onishi, T. Aruga and Y. Iwasawa, An unusual adsorption state of hydrogen on the Pd(100)-p(2×2)-p4g-Al bimetallic surface 283 (1993) 213
M. Sasaki, J. Yuhara, M. Inoue and K. Morita, Studies on 2D Au–Cu binary adsorbates on Si(111) surfaces by means of combined LEED/AES/RBS techniques 283 (1993) 327
C. Egawa, Y. Tezuka, S. Oki and Y. Murata, Structures of ultra-thin Fe overlayers on a Rh(001) surface 283 (1993) 338
K. Fang, H.-N. Yang and G.-C. Wang, Modification of surface structures and roughening phase transition in Pb(110) by impurities 284 (1993) L399
M. Horn-von Hoegen, M. Pook, A. Al Falou, B.H. Müller and M. Henzler, The interplay of surface morphology and strain relief in surfactant mediated growth of Ge on Si(111) 284 (1993) 53
J.W. Evans and M.C. Bartelt, Irreversible island formation during deposition: separation distributions and diffraction profiles 284 (1993) L437
K. Jacobi and U. Myler, Chemisorption of H, H_2O and C_2H_4 on Si(113): implications for the structure 284 (1993) 223
K.M. Hock and R.E. Palmer, Temperature dependent behaviour in the adsorption of submonolayer potassium on graphite 284 (1993) 349
P. Hu, A. Wander, L. Morales de la Garza, M.P. Bessent and D.A. King, An adsorbate-stabilised vacancy structure for Cu on W{100}: a surface alloy 286 (1993) L542
D.R. Eisner and T.L. Einstein, Simple formula for Miller indices of periodically kinked and stepped fcc surfaces 286 (1993) L559
U. Starke, A. Barbieri, N. Materer, M.A. Van Hove and G.A. Somorjai, Ethylidyne on Pt(111): determination of adsorption site, substrate relaxation and coverage by automated tensor LEED 286 (1993) 1
N.T. Barrett, B. Villette, A. Senhaji, C. Guillot, R. Belkhou, G. Tréglia and B. Legrand, Experimental study of the growth and dissolution of Re/W(110) by core level photoemission spectroscopy: formation of a surface alloy 286 (1993) 150
M. Tüshaus, P. Gardner and A.M. Bradshaw, A high resolution vibrational spectroscopic study of CO/K coadsorption on Pt{111} 286 (1993) 212
G. Hoogers and D.A. King, Adsorbate-induced step-doubling reconstruction of a vicinal metal surface: oxygen on Rh{332} 286 (1993) 306
L. Hammer, W. Nichtl-Pecher, N. Elbel, W. Stammler, K. Heinz and K. Müller, Phase diagram for hydrogen adsorption on Rh(311) 287/288 (1993) 84
C. Mundt and C. Benndorf, Influence of steps on the H_2O adsorption on Ni(s)(111) 287/288 (1993) 119
B. Rausenberger, W. Święch, W. Engel, A.M. Bradshaw and E. Zeitler, LEEM and selected-area LEED studies of reaction from propagation 287/288 (1993) 235
T. Urano, S. Hongo and T. Kanaji, Structure analysis of an alkali metal adsorbed Si(001)(2×1) surface by tensor LEED 287/288 (1993) 294

Low energy electron diffraction (continued)
H. Yamazaki and A. Uchiyama, Graphite formation on natural diamond (111) surfaces by electron irradiation and heat treatment 287/288 (1993) 308
N. Safta, J.-P. Lacharme and C.A. Sébenne, Clean Si(110): a surface with intrinsic or extrinsic defects? 287/288 (1993) 312
M. Alnot and J.J. Ehrhardt, Pt(110)(1×1) surfaces prepared by low temperature platinum deposition: surface characterization and stability 287/288 (1993) 325
K. Nakayama and S. Usami, LEED and EELS studies on vanadium (110) and (111) single crystal surfaces 287/288 (1993) 355
S.D. Peacor and T. Hibma, LEED study of Na_xWO_3 tungsten bronze: structural relaxation of a perovskite surface 287/288 (1993) 403
G. Hilgers, M. Potthoff, N. Müller and U. Heinzmann, Structural investigations on Xe/Pd(111) with spin-polarized LEED 287/288 (1993) 414
C. Stampfl, J. Burchhardt, M. Nielsen, D.L. Adams, M. Scheffler, H. Over and W. Moritz, The structure of Al(111)–K-($\sqrt{3} \times \sqrt{3}$)R30° determined by LEED: stable and metastable adsorption sites 287/288 (1993) 418
H. Tochihara and S. Mizuno, Geometries of Li induced structures on Cu(001): LEED and ARUPS studies 287/288 (1993) 423
M.A. Van Hove, W. Moritz, H. Over, P.J. Rous, A. Wander, A. Barbieri, N. Materer, U. Starke, D. Jentz, J.M. Powers, G. Held and G.A. Somorjai, Fitting dozens of coordinates by LEED: automated determination of complex surface structures 287/288 (1993) 428
U. Starke, N. Materer, A. Barbieri, R. Döll, K. Heinz, M.A. Van Hove and G.A. Somorjai, A low-energy electron diffraction study of oxygen, water and ice adsorption on Pt(111) 287/288 (1993) 432
H. Miki, T. Nagase, K. Sato, H. Watanabe, S. Sugai, K. Kawasaki and T. Kioka, Structure of Pt(100) for NO adsorption studied by FEM and LEED 287/288 (1993) 448
M.O. Schweitzer, T.S. Jones, C.F. McConville and N.V. Richardson, The deposition of a thin Au film on InSb(100) 287/288 (1993) 545
H. Stolz, M. Höfer and H.-W. Wassmuth, TPD, AES, $\Delta\phi$ and LEED investigations of cesium adsorbed on Ag(100) 287/288 (1993) 564
A. Neumann, K. Christmann and T. Solomun, Binding states and structural phase transformations upon iodine adsorption on a gold (100) surface 287/288 (1993) 593
I.L. Bolotin, V.A. Grazhulis, A.M. Ionov, S.G. Karabashev and D.A. Shuliatev, Electron spectroscopy for (001)$Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4}$ ($n = 1, 2$); comparative studies 287/288 (1993) 630
M. Donath, Recent developments in surface and thin film magnetism probed by spin-polarized electrons 287/288 (1993) 722
O. Rader, C. Carbone, W. Clemens, E. Vescovo, S. Blügel, W. Eberhardt and W. Gudat, Growth and magnetic behavior of Pd on Fe(100) 287/288 (1993) 736
M. Sokolowski and H. Pfnür, Critical behaviour of the p(2×2) and ($\sqrt{3} \times \sqrt{3}$)R30° order–disorder phase transitions of S/Ru(001) 287/288 (1993) 831
H. Zimmermann, M. Nold, U. Romahn, H. Göbel, P. von Blanckenhagen and W. Schommers, Steps, point defects and thermal expansion at the Au(110) surface 287/288 (1993) 876
R. Ferrando and E. Scalas, Incoherent scattering width in 2D systems with lateral interactions 287/288 (1993) 907
Ch. Ammer, Stacking faults in epitaxy investigated by SPALEED 287/288 (1993) 964
K. Marre and H. Neddermeyer, Growth of ordered thin films of NiO on Ag(100) and Au(111) 287/288 (1993) 995
T.M. Jung, R. Kaplan and S.M. Prokes, Ga on Si(112): growth and energetics of thermal desorption 289 (1993) L577
D.K. Flynn-Sanders, J.W. Evans and P.A. Thiel, Homoepitaxial growth on Pd(100) 289 (1993) 75

Low energy electron diffraction (continued)
C. Wigren, J.N. Andersen, R. Nyholm and U.O. Karlsson, Epitaxial silicide formation in the Mg/Si(111) system 289 (1993) 290
J.N. Andersen, E. Lundgren, R. Nyholm and M. Qvarford, Alkali metal adsorption on Al(111) 289 (1993) 307
V. Fritzsche, J.B. Pendry, U. Löffler, H. Wedler, M.A. Mendez and K. Heinz, Surface dipole moments from LEED investigations 289 (1993) 389
M.B. Jensen, U. Myler and P.A. Thiel, Local and collective structure of formate on Pt(111) 290 (1993) L655
S. Imaduddin and R.J. Lad, Aluminum deposition on NiO(100): growth, structure and composition of the interface 290 (1993) 35
M.A. Mendez, C. Glück, M. Wagner, U. Löffler, R. Döll and K. Heinz, Sampling of diffuse LEED intensity distributions by conventional spot intensities 290 (1993) 45
F.J. Esposto, C.-S. Zhang, P.R. Norton and R.S. Timsit, Segregation studies of an Al–Li alloy 290 (1993) 93
M. Taniguchi, E.K. Kuzembaev and K. Tanaka, A mimic model of Pt–Rh catalyst prepared by electrochemical deposition of Rh on the Pt(100) surface 290 (1993) L711
A. Atrei, U. Bardi, J.X. Wu, E. Zanazzi and G. Rovida, LEED crystallographic investigation of ultrathin films formed by deposition of Sn on the Pt(111) surface 290 (1993) 286
D.W. Suggs and J.L. Stickney, Studies of the structures formed by the alternated electrodeposition of atomic layers of Cd and Te on the low-index planes of Au. I. LEED and Auger studies 290 (1993) 362

Luminescence
D.G. Li, N.S. McAlpine and D. Haneman, Surface barriers and potentials from luminescence on cleaved Si, GaAs, and InP 281 (1993) L315
K. Kunimori, H. Uetsuka, T. Iwade, T. Watanabe and S. Ito, Infrared chemiluminescence of CO and CO_2 produced by molecular-beam surface reactions 283 (1993) 58
D.G. Li, N.S. McAlpine and D. Haneman, Precision determination of long-wavelength cleavage luminescence energy and derivation of minimum surface state gap on clean cleaved Si surfaces 289 (1993) L609
J. Xu, L. Hudson, R.G. Albridge, A.V. Barnes and N.H. Tolk, Hydrogen exposure-enhanced CN^* emission from alkali-halide surfaces 289 (1993) L622

Magnesium oxide
G. Pacchioni, Physisorbed and chemisorbed CO_2 at surface and step sites of the MgO(100) surface 281 (1993) 207
C. Girardet and P.N.M. Hoang, Dynamics of a frustrated rare gas monolayer adsorbed on a corrugated substrate: resonance and hybridization of the dispersion curves of Ar on MgO(100) 282 (1993) 288
K. Domen, N. Akamatsu, H. Yamamoto, A. Wada and C. Hirose, Infrared-visible sum frequency generation study of HCOOH on an MgO(001) surface 283 (1993) 468
M. Gajdardziska-Josifovska, P.A. Crozier, M.R. McCartney and J.M. Cowley, Ca segregation and step modifications on cleaved and annealed MgO(100) surfaces 284 (1993) 186
T. Gotoh and S. Takagi, Angular distribution of ions desorbed from clean and H_2O-exposed MgO(001) by electron stimulation 287/288 (1993) 31
C. Noguera, J. Goniakowski and S. Bouette-Russo, Electronic structure of clean and hydroxylated oxide surfaces 287/288 (1993) 188
M.A. Karolewski and R.G. Cavell, Characterization by SIMS of Brønsted acid chemisorption on MgO(100) and Cs/MgO(100) 290 (1993) 80
E. Knözinger, K.-H. Jacob, S. Singh and P. Hofmann, Hydroxyl groups as IR active surface probes on MgO crystallites 290 (1993) 388

Magnetic measurements
G. Spierings, V. Koutsos, H.A. Wierenga, M.W.J. Prins, D.L. Abraham and Th. Rasing, Optical second harmonic generation study of interface magnetism 287/288 (1993) 747

Manganese
B. Sieben and H.P. Bonzel, Adsorption of H_2 and CO on Mn/Fe(110) surfaces 282 (1993) 246

Magnetic structures
R. Lüthi, H. Haefke, P. Grütter, H.-J. Güntherodt, L. Szcześniak and K.P. Meyer, Surface and domain structures of ferroelectric GASH crystals studied by scanning force microscopy 285 (1993) L498
T. Vinchon, A.M. Oles, D. Spanjaard and M.C. Desjonquères, Are the dimers of the Si(001)(2×1) surface antiferromagnetic? 287/288 (1993) 534
M. Donath, Recent developments in surface and thin film magnetism probed by spin-polarized electrons 287/288 (1993) 722
O. Rader, C. Carbone, W. Clemens, E. Vescovo, S. Blügel, W. Eberhardt and W. Gudat, Growth and magnetic behavior of Pd on Fe(100) 287/288 (1993) 736
Y.U. Idzerda, L.H. Tjeng, H.-J. Lin, C.J. Gutierrez, G. Meigs and C.T. Chen, Magnetic structure of Fe/Cr/Fe trilayers 287/288 (1993) 741
M.W.J. Prins, D.L. Abraham and H. van Kempen, Photo-assisted tunneling at ferromagnet/semiconductor interfaces 287/288 (1993) 750
Y. Teraoka and Y. Tabata, Surface lattice relaxation in chromium 287/288 (1993) 754
B. Weimert, J. Noffke and L. Fritsche, Electronic and magnetic properties of a Co-monolayer on a W(110) substrate 289 (1993) 397

Mercury
O. Biham, L.-W. Chen and G. Vidali, Models for monolayers adsorbed on a square substrate 287/288 (1993) 815

Metals
B.D. Todd and R.M. Lynden-Bell, Surface and bulk properties of metals modelled with Sutton–Chen potentials 281 (1993) 191
J.K. Nørskov, K.W. Jacobsen, P. Stoltze and L.B. Hansen, Many-atom interactions in metals 283 (1993) 277
T.E. Madey, J. Guan, C.-Z. Dong and S.M. Shivaprasad, Morphological instabilities induced by ultrathin films on W(111) 287/288 (1993) 826
A.M. Rodríguez, G. Bozzolo and J. Ferrante, Multilayer relaxation and surface energies of fcc and bcc metals using equivalent crystal theory 289 (1993) 100
E. Shustorovich and A.T. Bell, Decomposition and reduction of NO on transition metal surfaces: bond order conservation Morse potential analysis 289 (1993) 127
A. Zwartkruis and T. Fondén, Auger rates and spectra for simple models of He^+ in front of a metal surface 290 (1993) 134
P. Zanardi and C. Calandra, Charge and energy exchange between a metal and a two-level particle in a metastable state 290 (1993) 141

Methane
V.A. Ukraintsev and I. Harrison, Methane dissociative chemisorption on Pt(111) explored by microscopic reversibility 286 (1993) L571
R.W. Verhoef, D. Kelly, C.B. Mullins and W.H. Weinberg, Isotope effects for the direct dissociative chemisorption of methane and ethane on Ir(110) and vibrationally assisted chemisorption 287/288 (1993) 94
H. Yang and J.L. Whitten, Reaction of CH_4 with substitutional Fe/Ni(111) 289 (1993) 30

Methane (continued)
W.E.J. van Kooten, D.D. Kragten, O.L.J. Gijzeman and J.W. Geus, Hydrocarbon interaction with clean and oxidised Cu(111) 290 (1993) 302

Methanol
J.E. Whitten, C.E. Young, M.J. Pellin, D.M. Gruen and P.L. Jones, Direct detection of a metal desorption channel: electron-stimulated desorption of aluminum from methanol-dosed Al(111) 282 (1993) 97
F. Solymosi, A. Berkó and Z. Tóth, Adsorption and dissociation of CH_3OH on clean and K-promoted Pd(100) surfaces 285 (1993) 197
N. Kizhakevariam and E.M. Stuve, Promotion and poisoning of the reaction of methanol on clean and modified platinum (100) 286 (1993) 246

Mica
T.G. Sharp, P.I. Oden and P.R. Buseck, Lattice-scale imaging of mica and clay (001) surfaces by atomic force microscopy using net attractive forces 284 (1993) L405
H.-G. Busmann, R. Hiss, H. Gaber and I.V. Hertel, Growth mechanisms of C_{60}-molecular beam epitaxy on mica 289 (1993) 381

Molecular beam epitaxy
T. Kawamura and M.R. Wilby, Transient growth in molecular beam epitaxy of Si on Si(100) vicinal surfaces 283 (1993) 360
M.F. Crowley, D. Srivastava and B.J. Garrison, Molecular dynamics investigation of the MBE growth of Si on Si{110} 284 (1993) 91
T. Ide, A. Yamashita and T. Mizutani, STM observation of growth interruption effect of MBE growth 287/288 (1993) 1013
H. Sirringhaus, N. Onda, E. Müller-Gubler, P. Müller, St. Zehnder and H. von Känel, Fundamental phenomena in heteroepitaxial growth studied by scanning tunneling microscopy 287/288 (1993) 1019
H.-G. Busmann, R. Hiss, H. Gaber and I.V. Hertel, Growth mechanisms of C_{60}-molecular beam epitaxy on mica 289 (1993) 381

Molybdenum
K.-I. Fukui, T. Aruga and Y. Iwasawa, Chemisorption of CO and H_2 on clean and oxygen-modified Mo(112) 281 (1993) 241
X. Xu and D.W. Goodman, The preparation and characterization of ultra-thin silicon dioxide films on a Mo(110) surface 282 (1993) 323
R. Landers, P.A.P. Nascente, S.G.C. de Castro and G.G. Kleiman, Bremsstrahlung-excited LMN and LMM Auger spectra of Nb, Mo, Pd, and Ag 287/288 (1993) 802
Y. Gotoh and E. Yanokura, Epitaxial growth of MoO_2 on a Mo(110) surface observed by RHEED 287/288 (1993) 979
D.A. Hutt and D.W. Bassett, Growth of Ir overlayers on a Mo(110) surface 287/288 (1993) 1000
Han Xu, P. Uvdal, C.M. Friend and J. Stöhr, The adsorption structure of 2, 5-dihydrothiophene on Mo(110)-(4×1)-S: ring orientation as determined by NEXAFS 289 (1993) L599
Y. Song and R. Gomer, Diffusion of oxygen on the Mo(110) plane 290 (1993) 1
J.A. Prybyla and P.J. Estrup, The effect of surface reconstruction on desorption: H/Mo(100) 290 (1993) 413

Mössbauer spectroscopy
G. Krausch, R. Fink, K. Jacobs, B. Luckscheiter, J. Lohmüller, B.-U. Runge, U. Wöhrmann and G. Schatz, Indium adsorption on silicon surfaces: a PAC study 285 (1993) 81

Naphtalene, see Organic substances

Neutron scattering
M. Maruyama, M. Bienfait, F.C. Liu, O.E. Vilches and F. Rieutord, Quasi-liquid molecular layer at solid hydrogen surfaces 283 (1993) 333
R. Ferrando and E. Scalas, Incoherent scattering width in 2D systems with lateral interactions 287/288 (1993) 907

Nickel
A. Wander, C.J. Barnes, L.D. Mapledoram and D.A. King, Structural transitions in ultra-thin nickel films on Rh{111} 281 (1993) 42
U. Grosche, H. Hamadeh, O. Knauff, R. David and H.P. Bonzel, Orientation of adsorbed ethylene oxide on Ni(110) by X-ray photoelectron diffraction 281 (1993) L341
R.S. Saiki, A.P. Kaduwela, M. Sagurton, J. Osterwalder, D.J. Friedman, C.S. Fadley and C.R. Brundle, X-ray photoelectron diffraction and low-energy electron diffraction study of the interaction of oxygen with the Ni(001) surface: c(2×2) to saturated oxide 282 (1993) 33
L.S. Caputi, R.G. Agostino, A. Amoddeo, E. Colavita and A. Santaniello, X-ray photoelectron diffraction study of CO- and NO-saturated Ni(111) 282 (1993) 62
W.-D. Wang, N.J. Wu, P.A. Thiel and M.C. Tringides, Epitaxial growth in a strained system: Ni(100)–O(7×7) 282 (1993) 229
J.C. Le Bossé, G. Hansali, J. Lopez, G. Wiatrowski and I. Zasada, Site occupancy pair correlation functions and structure factors of partially ordered overlayers. II. Application to O/Ni(100) 282 (1993) 389
H. He, J. Nakamura and K. Tanaka, Formation of CH_x species on a Ni(100) surface by the hydrogenation of carbidic carbon 283 (1993) 117
A. Takano and K. Ueda, Electron stimulated desorption of O^+ from CO adsorbed on a Ni(110) surface 283 (1993) 199
D.P. Woodruff, Structural studies of adsorbed and coadsorbed molecular species 283 (1993) 309
N. Al-Sarraf, J.T. Stuckless, C.E. Wartnaby and D.A. King, Adsorption microcalorimetry and sticking probabilities on metal single crystal surfaces 283 (1993) 427
Y.U. Idzerda and G.A. Prinz, Auger intensity mapping of monolayers of Ni/Cu(001) 284 (1993) L394
J.B. Zhou, T. Gustafsson, R.F. Lin and E. Garfunkel, Medium energy ion scattering study of Ni on ultrathin films of SiO_2 on Si(111) 284 (1993) 67
E. Kopatzki, S. Günther, W. Nichtl-Pecher and R.J. Behm, Homoepitaxial growth on Ni(100) and its modification by a preadsorbed oxygen adlayer 284 (1993) 154
V. Maurice, H. Talah and P. Marcus, Ex situ STM imaging with atomic resolution of Ni(111) electrodes passivated in sulfuric acid 284 (1993) L431
N. Memmel, G. Rangelov and E. Bertel, Influence of the substrate on the band structure of alkali metal monolayers 285 (1993) 109
A. Görling, L. Ackermann, J. Lauber, P. Knappe and N. Rösch, On the coadsorption of CO and alkali atoms at transition metal surfaces: a LCGTO-LDF cluster study 286 (1993) 26
A.M. Glines and A.B. Anton, Effects of the hydrogen-induced (1×2) surface reconstruction on the kinetics of ethylene hydrogenation on Ni(110) 286 (1993) 122
E. Anno and T. Yamaguchi, Optical absorption of Ni and Pd particles: enhanced correlation interaction between conduction electrons 286 (1993) 168
K.-H. Allers, H. Pfnür, P. Feulner and D. Menzel, Associative desorption of HD and D_2 from a Ni(100) surface: angular and velocity distributions 286 (1993) 297
A. Takano and K. Ueda, Energy distributions of oxygen ions desorbed from CO- and NO-covered nickel 287/288 (1993) 25
W. Soszka, Impact collision ion scattering spectroscopy at large incidence angles as a method for studying rare-gas adsorption 287/288 (1993) 69

Nickel (continued)
D.E.A. Gordon and R.M. Lambert, CO_2 adsorption on oxygen-modified Ni(111) 287/288 (1993) 114
C. Mundt and C. Benndorf, Influence of steps on the H_2O adsorption on Ni(s)(111) 287/288 (1993) 119
H. Kuramochi, F. Imai, H. Kondoh, K. Kunimori, T. Uchijima and H. Nozoye, Decomposition of cyclopentane on Ni(755): peculiar decomposition behavior of cyclopentane 287/288 (1993) 217
M. Finazzi, L. Duò, G. Bacchin, F. Ciccacci and E. Puppin, Ultraviolet inverse photoemission study of the oxidation of Fe, Co and Ni 287/288 (1993) 264
R. Dippel, K.-U. Weiss, K.-M. Schindler, D.P. Woodruff, P. Gardner, V. Fritzsche, A.M. Bradshaw and M.C. Asensio, Multiple site coincidences and their resolution in photoelectron diffraction: PF_3 adsorbed on Ni(111) 287/288 (1993) 465
M. Weinelt, P. Zebisch and H.-P. Steinrück, A multimethod-investigation of the adsorption of ethylene oxide on Ni(110) 287/288 (1993) 471
W. Kuch, M. Schulze, W. Schnurnberger and K. Bolwin, XPS lineshape analysis of potassium coadsorbed with water on Ni(111) 287/288 (1993) 600
M. Donath, Recent developments in surface and thin film magnetism probed by spin-polarized electrons 287/288 (1993) 722
T. Uchikoshi, Y. Sakka, S. Ohno, H. Okuyama and K. Yoshihara, Adsorption of hydrogen on Ni and Ni–TiO_2 composite ultrafine particles 287/288 (1993) 1082
L.S. Caputi, R.G. Agostino, A.Amoddeo, S. Molinaro, G. Chiarello, E. Colavita and A. Santaniello, Orientational study of low coverage CO and NO on Ni(111) 289 (1993) L591
G. Gross and K.H. Rieder, Revisiting the iterative procedure for atomic beam diffraction analyses: improvements, caveats and first application to a 2D adsorption structure 289 (1993) 180
C. Massobrio, Comment on 'Structure and diffusion on clusters on Ni surfaces by C.-L. Liu and J.B. Adams' 289 (1993) L638
C.-L. Liu and J.B. Adams, Reply to "Comment on 'Structure and diffusion of clusters on Ni surfaces' by C. Massobrio" 289 (1993) L641
R. Lamber and N.I. Jaeger, Electron microscopy study of the interaction of Ni, Pd and Pt with carbon. III. Formation of a substitutional Pt–C carbide in ultrafine platinum particles 289 (1993) 247
S. Tjandra and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255
H.E. Dastoor, P. Gardner and D.A. King, The coadsorption of ammonia and oxygen on Ni{110}: a RAIRS study 289 (1993) 279
S.X. Huang, T.S. Rufael and J.L. Gland, Diimide formation on the Ni(100) surface 290 (1993) L673
M.A. Mendez, C. Glück, M. Wagner, U. Löffler, R. Döll and K. Heinz, Sampling of diffuse LEED intensity distributions by conventional spot intensities 290 (1993) 45
X. Shi, D. Tang, D. Heskett, K.-D. Tsuei, H. Ishida and Y. Morikawa, Coverage-dependent core level photoemission investigations of Na/Cu(111) and Na/Ni(111) 290 (1993) 69
D.D. Koleske and S.J. Sibener, Molecular dynamics simulations of the basal planes of Ni and Cu using Finnis–Sinclair potentials 290 (1993) 179

Nickel oxide
V. Maurice, H. Talah and P. Marcus, Ex situ STM imaging with atomic resolution of Ni(111) electrodes passivated in sulfuric acid 284 (1993) L431
K. Marre and H. Neddermeyer, Growth of ordered thin films of NiO on Ag(100) and Au(111) 287/288 (1993) 995
S. Imaduddin and R.J. Lad, Aluminum deposition on NiO(100): growth, structure and composition of the interface 290 (1993) 35

Niobium
K. Obara, M. Shioga and T. Hirose, Phase transitions of adsorbed oxygen on niobium superfine particles 283 (1993) 387
R. Landers, P.A.P. Nascente, S.G.C. de Castro and G.G. Kleiman, Bremsstrahlung-excited LMN and LMM Auger spectra of Nb, Mo, Pd, and Ag 287/288 (1993) 802

Nitric oxide
L.S. Caputi, R.G. Agostino, A. Amoddeo, E. Colavita and A. Santaniello, X-ray photoelectron diffraction study of CO- and NO-saturated Ni(111) 282 (1993) 62
S. Sugai, K. Takeuchi, T. Ban, H. Miki, K. Kawasaki and T. Kioka, Adsorption and dissociation of NO on Pt(100) and (310) studied by AES, UPS and XPS 282 (1993) 67
A. Namiki, S. Suzuki, H. Kato, T. Nakamura and T. Suzaki, Dynamical study of alkali promotion of NO sticking on Si(100) 283 (1993) 9
K. Sugiyama, Y. Igari and I. Kusunoki, A molecular beam study of desorption kinetics of GeO from Ge(111) surfaces 283 (1993) 64
F. Budde, T.F. Heinz, A. Kalamarides, M.M.T. Loy and J.A. Misewich, Vibrational distributions in desorption induced by femtosecond laser pulses: coupling of adsorbate vibration to substrate electronic excitation 283 (1993) 143
K. Fukutani, A. Peremans, K. Mase and Y. Murata, Photo-stimulated desorption of NO from a Pt(001) surface 283 (1993) 158
D.P. Woodruff, Structural studies of adsorbed and coadsorbed molecular species 283 (1993) 309
A. Ludviksson, C. Huang, H.J. Jänsch and R.M. Martin, Isotopic studies of the reaction of NO on silver surfaces 284 (1993) 328
A. Morgante, D. Cvetko, A. Santoni, K.C. Prince, V.R. Dhanak, G. Comelli and M. Kiskinova, A synchrotron radiation study of NO and oxygen on Rh(110) 285 (1993) 227
T. Munakata, K. Mase and I. Kinoshita, Two-photon photoemission from NO adsorbed on Cu(111) 286 (1993) 73
A. Takano and K. Ueda, Energy distributions of oxygen ions desorbed from CO- and NO-covered nickel 287/288 (1993) 25
K.M. Neyman and N. Rösch, Negatively charged μ_3-ON species on Ag(111): a LCGTO-LDF cluster analysis of HREELS data 287/288 (1993) 64
K.L. Kostov, H. Rauscher and D. Menzel, The role of coadsorbed oxygen in NCO formation on Ru(001) 287/288 (1993) 283
H. Miki, T. Nagase, K. Sato, H. Watanabe, S. Sugai, K. Kawasaki and T. Kioka, Structure of Pt(100) for NO adsorption studied by FEM and LEED 287/288 (1993) 448
S. Sugai, K. Shimizu, H. Watanabe, H. Miki, K. Kawasaki and T. Kioka, Chemisorption of NO on Pt(210) studied by UPS, XPS and AES 287/288 (1993) 455
L.S. Caputi, R.G. Agostino, A.Amoddeo, S. Molinaro, G. Chiarello, E. Colavita and A. Santaniello, Orientational study of low coverage CO and NO on Ni(111) 289 (1993) L591
T.R. Ward, R. Hoffmann and M. Shelef, Coupling nitrosyls as the first step in the reduction of NO on metal surfaces: the special role of rhodium 289 (1993) 85
E. Shustorovich and A.T. Bell, Decomposition and reduction of NO on transition metal surfaces: bond order conservation Morse potential analysis 289 (1993) 127
A. Gross and W. Brenig, Vibrational excitation of NO in NO/Ag scattering revisited 289 (1993) 335

Nitrides
M. Shinn, P.B. Mirkarimi and S.A. Barnett, Nucleation of lattice-mismatched transition-metal nitride films: limitations on superlattice growth 281 (1993) 1
M. Ohno, P. Decleva and G. Fronzoni, Many-body calculations of the core excitation spectra of N_2 and NiN_2: inequivalent N atoms and disappearance of the giant shake-up satellite in NiN_2 284 (1993) 372

Nitrogen
L. Soriano, M. Abbate, J.C. Fuggle, C. Jiménez, J.M. Sanz, L. Galán, C. Mythen and H.A. Padmore, The interaction of nitrogen with titanium studied by soft X-ray absorption spectroscopy: adsorption versus implantation 281 (1993) 120
M. Ohno, P. Decleva and G. Fronzoni, Many-body calculations of the core excitation spectra of N_2 and NiN_2: inequivalent N atoms and disappearance of the giant shake-up satellite in NiN_2 284 (1993) 372
H. Asada, S. Doi and H. Kawano, The phase of condensate coexisting with the solid phase of nitrogen on Grafoil, studied by volumetric adsorption measurements of nitrogen 286 (1993) L554
K. Ota and S. Usami, Study on the adsorption of oxygen and nitrogen on a W(100) surface with an analysis of electron energy-loss fine structure 287/288 (1993) 99
P. Gardner, R. Martin, M. Tüshaus, J. Shamir and A.M. Bradshaw, The structure-sensitive adsorption of N_2 on the (1×1) and (5×1) surfaces of Ir{100} 287/288 (1993) 135
L. Šiller, K.M. Hock, R.E. Palmer and J.F. Wendelken, Resonance electron scattering by adsorbed molecules: σ^* resonance energy versus bond length 287/288 (1993) 165
A. Nilsson, O. Björneholm, H. Tillborg, B. Hernnäs, R.J. Guest, A. Sandell, R.E. Palmer and N. Mårtensson, Core level spectroscopy of physisorbed molecules on graphite 287/288 (1993) 758
H. Niehus and C. Achete, Surface structure investigation of nitrogen and oxygen on $Cu_3Au(100)$ 289 (1993) 19
Y. Okuno, M. Kuwahara, M. Fukui and Y. Shintani, The effects of residual gases on optical constants of Al films 290 (1993) 421

Nitrous oxide
K. Sawabe and Y. Matsumoto, Laser-induced photochemistry of nitrous oxide on a Pt(111) surface 283 (1993) 126

Noble gases
J. Fan and M. Trenary, The influence of coadsorbates on the overlayer structure of PF_3 on Pt(111) 282 (1993) 76
C. Girardet and P.N.M. Hoang, Dynamics of a frustrated rare gas monolayer adsorbed on a corrugated substrate: resonance and hybridization of the dispersion curves of Ar on MgO(100) 282 (1993) 288
D.E. Weibel, T. Hirayama and I. Arakawa, Electron stimulated desorption from the surface of solid Ne: kinetic energy and angular distributions of desorbed metastables 283 (1993) 204
T. Minoguchi, Vortex confinement in superfluid films on porous media 283 (1993) 393
M. Kubota, Superfluidity of thin ^{4}He films adsorbed on well-difined porous glasses 283 (1993) 404
S. Nakada, Y. Narahara and K. Kono, Interaction between third sound and surface irregularities 283 (1993) 414
U. Albrecht, P. Evers and P. Leiderer, Annealing behavior of quench-condensed hydrogen and deuterium films 283 (1993) 419
A. Klekamp and E. Umbach, Physisorption on an epitaxial NaCl(100) double-layer: SF_6 and xenon 284 (1993) 291
P. Zeppenfeld, K. Kern, R. David, U. Becher and G. Comsa, Mixtures of Kr and Xe physisorbed on Pt(111): a prototype of a stochastic two-dimensional alloy 285 (1993) L461
M. Sato, Ion current characteristics of an Ar field ionization source 285 (1993) L525
H. Schlichting and D. Menzel, Techniques for wide range, high resolution and precision, thermal desorption measurements. I. Principles of apparatus and operation 285 (1993) 209

Noble gases (continued)
K. Bärwinkel and L. Rottmann, A model for irreversible scattering of gas atoms on a metal surface 287/288 (1993) 35
W. Soszka, Impact collision ion scattering spectroscopy at large incidence angles as a method for studying rare-gas adsorption 287/288 (1993) 69
U. Schneider, G.R. Castro and K. Wandelt, Adsorption on ordered $Cu_3Pt(111)$: site selectivity 287/288 (1993) 146
G. Hilgers, M. Potthoff, N. Müller and U. Heinzmann, Structural investigations on Xe/Pd(111) with spin-polarized LEED 287/288 (1993) 414
Y. Baba, H. Yamamoto and T.A. Sasaki, Core-level electronic structures of rare-gas atoms implanted in transition metals studied by XPS and XAES 287/288 (1993) 806
T. Kosugi, Y. Usui and I. Arakawa, Adsorption/desorption hysteresis in the adsorption isotherms for Kr and Xe on exfoliated graphite 287/288 (1993) 862

Organic substances
I. Pápai, J. Ushio and D.R. Salahub, Chemisorption of formate and acetate on cluster models of Rh and bimetallic RhSn clusters 282 (1993) 262
K. Kunimori, H. Uetsuka, T. Iwade, T. Watanabe and S. Ito, Infrared chemiluminescence of CO and CO_2 produced by molecular-beam surface reactions 283 (1993) 58
H. Namba, T. Yamaguchi and H. Kuroda, Chemisorption and photo-decomposition of $(CH_3)_2GeH_2$ adsorbed on Si(100) studied by UPS and LEED 283 (1993) 132
S. Sato and Y. Ukisu, Mechanism of the photolysis of iron pentacarbonyl adsorbed on a Pt surface 283 (1993) 137
B.H. Loo and T. Kato, The bonding of acrylonitrile molecules to copper surfaces 284 (1993) 167
D.H. Fairbrother, X.D. Peng, R. Viswanathan, P.C. Stair, M. Trenary and J. Fan, Carbon–carbon coupling of methyl groups on Pt(111) 285 (1993) L455
Y. Bu, J.C.S. Chu and M.C. Lin, Thermal stability of trimethyl indium on Si(100)(2×1) as studied with HREELS, UPS and XPS: a comparison with the results from Si(111)(7×7) and Si(110) studies 285 (1993) 243
H. Asada, S. Doi and H. Kawano, The phase of condensate coexisting with the solid phase of nitrogen on Grafoil, studied by volumetric adsorption measurements of nitrogen 286 (1993) L554
V.M. Hallmark and S. Chiang, Imaging structural details in closely related molecular adsorbate systems 286 (1993) 190
Z.-M. Liu, X.-L. Zhou, J. Kiss and J.M. White, Interaction of CF_3I with Pt(111) 286 (1993) 233
C.L.A. Lamont, H. Conrad and A.M. Bradshaw, The photodissociation of methyl bromide chemisorbed on Cu{111}: influence of pre-adsorbed bromine 287/288 (1993) 169
H. Kuramochi, F. Imai, H. Kondoh, K. Kunimori, T. Uchijima and H. Nozoye, Decomposition of cyclopentane on Ni(755): peculiar decomposition behavior of cyclopentane 287/288 (1993) 217
J.C. Bertolini, J.L. Rousset, P. Miegge, J. Massardier and B. Tardy, On the large Pd surface segregation and reactivity of Pd_1Fe_{99} and Pd_5Fe_{95} dilute alloys 287/288 (1993) 346
A. Cassuto, Mane Mane, G. Tourillon, P. Parent and J. Jupille, Compared bonding geometries of C_2H_4 and C_3H_6 on K-covered Pt(111) surfaces 287/288 (1993) 460
M. Weinelt, P. Zebisch and H.-P. Steinrück, A multimethod-investigation of the adsorption of ethylene oxide on Ni(110) 287/288 (1993) 471
Han Xu, P. Uvdal, C.M. Friend and J. Stöhr, The adsorption structure of 2, 5-dihydrothiophene on Mo(110)-(4×1)-S: ring orientation as determined by NEXAFS 289 (1993) L599
R.D. Ramsier and J.T. Yates, Jr., Thermal and electron-induced behavior of d_6-benzene-chromium-tricarbonyl adsorbed on Ag(111) 289 (1993) 39

Organic substances (continued)
R. Raval, S.F. Parker and M.A. Chesters, C–H· · ·M interactions and orientational changes of cyclohexane on Cu(111): a RAIRS, EELS and LEED study 289 (1993) 227
D.P. Land, W. Erley and H. Ibach, HREELS investigation of the orientation and dehydrogenation of cyclohexane on Pt[111] 289 (1993) 237
S. Tjandra and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255
W.E.J. van Kooten, D.D. Kragten, O.L.J. Gijzeman and J.W. Geus, Hydrocarbon interaction with clean and oxidised Cu(111) 290 (1993) 302
R.N. Carter, A.B. Anton and G. Apai, Reactions of π-allyl with atomic oxygen and hydroxyl on Ag(110) 290 (1993) 319

Oxidation
Y. Serruys, T. Sakout and D. Gorse, Anodic oxidation of titanium in 1M H_2SO_4, studied by Rutherford backscattering 282 (1993) 279

Oxides
S. Kittaka, T. Sasaki, N. Fukuhara and H. Kato, Fourier transform infrared spectroscopy of H_2O molecules on the Cr_2O_3 surface 282 (1993) 255
S. Masuda and Y. Harada, Deexcitation of rare-gas metastable atoms on semiconductor surfaces: MoS_2 and $LaCoO_3$ 283 (1993) 78
J. Goniakowski, S. Bouette-Russo and C. Noguera, Acido-basic properties of simple oxide surfaces. III. Systematics of H^+ and OH^- adsorption 284 (1993) 315
Y. Liang and D.A. Bonnell, Atomic structures of reduced $SrTiO_3(001)$ surfaces 285 (1993) L510
J.K.N. Sharma, B.R. Chakraborty and S. Bera, Study of oxidation and silicidation of Ta by electron impact autoionization process 285 (1993) 237
C. Noguera, J. Goniakowski and S. Bouette-Russo, Electronic structure of clean and hydroxylated oxide surfaces 287/288 (1993) 188
T. Hikita, T. Hanada, M. Kudo and M. Kawai, Structure and electronic state of the TiO_2 and SrO terminated $SrTiO_3(100)$ surfaces 287/288 (1993) 377
T. Conard, L. Philippe, P.A. Thiry, Ph. Lambin and R. Caudano, Electron energy-loss spectroscopy and dynamics of $SrTiO_3(100)$ 287/288 (1993) 382
E.V. Rakova, RHEED study of the (0001)$LiNbO_3$ surface annealed at high temperature 287/288 (1993) 400
S.D. Peacor and T. Hibma, LEED study of Na_xWO_3 tungsten bronze: structural relaxation of a perovskite surface 287/288 (1993) 403
H. Guyot, Study of the electronic structure of Ba(Pb, Bi)$O_{3-\delta}$ single crystals 287/288 (1993) 633
F.H. Potter and R.G. Egdell, Electronic defect states at $Na_xWO_3(100)$ surfaces 287/288 (1993) 649
S.N. Schauer, R. Thomas and P. Williams, Energy distributions of ions produced by electron-stimulated desorption 290 (1993) 277

Oxygen
B.J. Cruickshank, D.D. Sneddon and A.A. Gewirth, In situ observations of oxygen adsorption on a Cu(100) substrate using atomic force microscopy 281 (1993) L308
A.F. Bellman, D. Cvetko, A. Morgante, M. Polli, F. Tommasini, K.C. Prince and R. Rosei, The (2×2) p2mg to (1×2) O/Rh(110) phase transition 281 (1993) L321
M.R. Davidson, G.B. Hoflund and R.A. Outlaw, Electron stimulated desorption of oxygen atoms and ions from an oxidized Ag–Zr alloy surface 281 (1993) 111
Y. Ohno, T. Matsushima and H. Miki, Anisotropy in the spatial distribution of reactive carbon dioxide desorption from narrow terraces on a reconstructed iridium (110)(1×2) surface 281 (1993) 234

Oxygen (continued)

K.-I. Fukui, T. Aruga and Y. Iwasawa, Chemisorption of CO and H_2 on clean and oxygen-modified Mo(112) 281 (1993) 241
S. Surnev, Interaction of oxygen with a Ge-covered Si(100) surface 282 (1993) 10
R.S. Saiki, A.P. Kaduwela, M. Sagurton, J. Osterwalder, D.J. Friedman, C.S. Fadley and C.R. Brundle, X-ray photoelectron diffraction and low-energy electron diffraction study of the interaction of oxygen with the Ni(001) surface: c(2×2) to saturated oxide 282 (1993) 33
B. Hellsing, Direct mechanism for photoinduced desorption and dissociation of O_2 on Pt(111) 282 (1993) 216
W.-D. Wang, N.J. Wu, P.A. Thiel and M.C. Tringides, Epitaxial growth in a strained system: Ni(100)–O(7×7) 282 (1993) 229
A. Mesarwi and A. Ignatiev, Interaction of Y overlayers with the GaAs(100) surface and oxidation of the Y/GaAs interface 282 (1993) 371
J.C. Le Bossé, G. Hansali, J. Lopez, G. Wiatrowski and I. Zasada, Site occupancy pair correlation functions and structure factors of partially ordered overlayers. II. Application to O/Ni(100) 282 (1993) 389
M. Nakamura, M. Tsukada and M. Aono, Interaction of low-velocity rare-gas ions with a solid surface 283 (1993) 46
K. Kunimori, H. Uetsuka, T. Iwade, T. Watanabe and S. Ito, Infrared chemiluminescence of CO and CO_2 produced by molecular-beam surface reactions 283 (1993) 58
K. Sugiyama, Y. Igari and I. Kusunoki, A molecular beam study of desorption kinetics of GeO from Ge(111) surfaces 283 (1993) 64
H.H. Rotermund, Investigation of dynamic processes in adsorbed layers by photoemission electron microscopy (PEEM) 283 (1993) 87
T. Matsushima, K. Shobatake and Y. Ohno, Spatial and velocity distributions of product desorption in carbon monoxide oxidation over palladium (110) and reconstructed platinum (110)(1×2) surfaces 283 (1993) 101
J. Sakai, G. Mizutani and S. Ushioda, Bonding of O_2, CO_2, and CO on a Cs/p-GaAs(100) surface and its relation to negative electron affinity 283 (1993) 217
D.P. Woodruff, Structural studies of adsorbed and coadsorbed molecular species 283 (1993) 309
K. Obara, M. Shioga and T. Hirose, Phase transitions of adsorbed oxygen on niobium superfine particles 283 (1993) 387
N. Al-Sarraf, J.T. Stuckless, C.E. Wartnaby and D.A. King, Adsorption microcalorimetry and sticking probabilities on metal single crystal surfaces 283 (1993) 427
Y. Naoi, K. Ito, Y. Uehara and Y. Murata, Very high resolution photoelectron spectra of NEA-GaAs 283 (1993) 457
X. Bao, J.V. Barth, G. Lehmpfuhl, R. Schuster, Y. Uchida, R. Schlögl and G. Ertl, Oxygen-induced restructuring of Ag(111) 284 (1993) 14
J. Schmidt, Ch. Stuhlmann and H. Ibach, Oxygen adsorption on the Pt(110)(1×2) surface studied with EELS 284 (1993) 121
E. Kopatzki, S. Günther, W. Nichtl-Pecher and R.J. Behm, Homoepitaxial growth on Ni(100) and its modification by a preadsorbed oxygen adlayer 284 (1993) 154
A. Cassuto, S. Schmidt and Mane Mane, The interaction of potassium submonolayers adsorbed on Pt(111) with oxygen and the adsorption of ethylene on the resulting modified surfaces: a TDS and UPS study 284 (1993) 273
G.J.C.S. van de Kerkhof, W. Biemolt, A.P.J. Jansen and R.A. van Santen, Dissociation of ammonia on a copper surface and the effect of oxygen coadsorption: a quantum-chemical study 284 (1993) 361
H. den Daas, O.L.J. Gijzeman and J.W. Geus, Oxidation of ultrathin iron layers on Cu(100). Composition of the oxide films 285 (1993) 15

Oxygen (continued)

A. Morgante, D. Cvetko, A. Santoni, K.C. Prince, V.R. Dhanak, G. Comelli and M. Kiskinova, A synchrotron radiation study of NO and oxygen on Rh(110) 285 (1993) 227

N. Kizhakevariam and E.M. Stuve, Promotion and poisoning of the reaction of methanol on clean and modified platinum (100) 286 (1993) 246

G. Hoogers and D.A. King, Adsorbate-induced step-doubling reconstruction of a vicinal metal surface: oxygen on Rh{332} 286 (1993) 306

G. Ertl, Self-organization in reactions at surfaces 287/288 (1993) 1

T. Hashimoto, J. Murakami and I. Kusunoki, Low-energy Ne^+ bombardment on O-adsorbed Be surfaces 287/288 (1993) 46

K. Ota and S. Usami, Study on the adsorption of oxygen and nitrogen on a W(100) surface with an analysis of electron energy-loss fine structure 287/288 (1993) 99

D.E.A. Gordon and R.M. Lambert, CO_2 adsorption on oxygen-modified Ni(111) 287/288 (1993) 114

T. Almeida, L.E. Cox, J.W. Ward and J.R. Naegele, Gas adsorption studies on Pu metal by photoemission spectroscopy 287/288 (1993) 141

H. Hirayama, A. de Meijere and E. Hasselbrink, The influence of lateral interactions on the angular distribution in photodesorption 287/288 (1993) 160

L. Šiller, K.M. Hock, R.E. Palmer and J.F. Wendelken, Resonance electron scattering by adsorbed molecules: σ^* resonance energy versus bond length 287/288 (1993) 165

W. Biemolt, A.P.J. Jansen, M. Neurock, G.J.C.S. van de Kerkhof and R.A. van Santen, The oxidation of ammonia by copper 287/288 (1993) 183

T. Matsushima, Y. Ohno and J.-I. Murakami, Spatial and velocity distributions of desorbing product carbon dioxide over a reconstructed platinum (110)(1×2) surface 287/288 (1993) 192

J.P. Warren, X. Zhang, J.E.T. Andersen and R.M. Lambert, Growth of Ce on Rh, surface alloy formation and the preparation and properties of Rh/ceria model planar catalysts 287/288 (1993) 222

B. Rausenberger, W. Święch, W. Engel, A.M. Bradshaw and E. Zeitler, LEEM and selected-area LEED studies of reaction from propagation 287/288 (1993) 235

G.W.R. Leibbrandt, L.H. Spiekman and F.H.P.M. Habraken, Temperature dependence of thin oxide film growth on Fe(110) 287/288 (1993) 245

G.W.R. Leibbrandt, L.H. Spiekman and F.H.P.M. Habraken, Plane-specific oxide stoichiometries on Fe single-crystal surfaces 287/288 (1993) 250

P.C. Görts, B.H.P. Dorren and F.H.P.M. Habraken, Oxidation of the Co($10\bar{1}0$) surface 287/288 (1993) 255

M. Finazzi, L. Duò, G. Bacchin, F. Ciccacci and E. Puppin, Ultraviolet inverse photoemission study of the oxidation of Fe, Co and Ni 287/288 (1993) 264

E. Poehlmann, M. Schmitt, H. Hoinkes and H. Wilsch, Velocity distributions of carbondioxide molecules from the oxidation of CO on Pt(111) 287/288 (1993) 269

M. Canepa, P. Cantini, L. Mattera, M. Salvietti, S. Terreni and F. Valdenazzi, Water dissociation on O(n×1)–Ag(110) phases 287/288 (1993) 273

T. Miyake and S. Yamamoto, Diffractive scattering of a helium molecular beam from monatomic layers on a W(110) surface 287/288 (1993) 340

U. Starke, N. Materer, A. Barbieri, R. Döll, K. Heinz, M.A. Van Hove and G.A. Somorjai, A low-energy electron diffraction study of oxygen, water and ice adsorption on Pt(111) 287/288 (1993) 432

D.J. O'Connor, E.R. Wouters, A.W. Denier van der Gon, J. Vrijmoeth, P.M. Zagwijn, W.F.J. Slijkerman, J.W.M. Frenken and J.F. van der Veen, Oxidation of Al(111) 287/288 (1993) 438

G. Dorenbos and D.O. Boerma, The structure of the Ag(110)-c(6×2)O surface determined with LEIS 287/288 (1993) 443

K. Edamoto, T. Anazawa, E. Miyazaki, H. Kato and S. Otani, Chemisorption state of atomic oxygen on TiC(100) surface: angle-resolved photoemission study 287/288 (1993) 667

Oxygen (continued)
A. Nilsson, O. Björneholm, H. Tillborg, B. Hernnäs, R.J. Guest, A. Sandell, R.E. Palmer and N. Mårtensson, Core level spectroscopy of physisorbed molecules on graphite 287/288 (1993) 758
S. Poulston, M. Tikhov and R.M. Lambert, Oxygen chemisorption on lead and gold precovered Ru(100) surfaces 287/288 (1993) 969
Y. Gotoh and E. Yanokura, Epitaxial growth of MoO_2 on a Mo(110) surface observed by RHEED 287/288 (1993) 979
M. Schmidt, H. Wolter, M. Schick, K. Kalki and K. Wandelt, Compression phases in copper/oxygen coadsorption layers on a Ru(0001) surface 287/288 (1993) 983
J.M. Montejano-Carrizales and J.L. Morán-López, Oxygen chemisorption effects on the spatial atomic distribution of CuNi, CuPd and NiPt nanostructures 287/288 (1993) 1070
R. Zhang, A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1
H. Niehus and C. Achete, Surface structure investigation of nitrogen and oxygen on $Cu_3Au(100)$ 289 (1993) 19
H.E. Dastoor, P. Gardner and D.A. King, The coadsorption of ammonia and oxygen on Ni{110}: a RAIRS study 289 (1993) 279
M.A. Mendez, C. Glück, M. Wagner, U. Löffler, R. Döll and K. Heinz, Sampling of diffuse LEED intensity distributions by conventional spot intensities 290 (1993) 45
P. Sjövall and B. Kasemo, A TDS study of oxygen, water and carbon dioxide coadsorption with potassium on graphite 290 (1993) 55
C.-S. Zhang, F.J. Esposto, B.J. Flinn, P.R. Norton and R.S. Timsit, The influence of Li surface segregation on the initial oxidation of an Al–Li alloy at room temperature 290 (1993) 103
K.E. Johnson, P.K. Wu, M. Sander and T. Engel, The mesoscopic and microscopic structural consequences from decomposition and desorption of ultrathin oxide layers on Si(100) studied by scanning tunneling microscopy 290 (1993) 213
R.N. Carter, A.B. Anton and G. Apai, Reactions of π-allyl with atomic oxygen and hydroxyl on Ag(110) 290 (1993) 319
Y. Okuno, M. Kuwahara, M. Fukui and Y. Shintani, The effects of residual gases on optical constants of Al films 290 (1993) 421

Palladium
B. Ealet and E. Gillet, Palladium alumina interface: influence of the oxide stoichiometry studied by EELS and XPS 281 (1993) 91
A. Sellidj and B.E. Koel, Growth mechanism and structure of ultrathin Pd films vapor-deposited on Ta(110) 281 (1993) 223
H.H. Rotermund, Investigation of dynamic processes in adsorbed layers by photoemission electron microscopy (PEEM) 283 (1993) 87
T. Matsushima, K. Shobatake and Y. Ohno, Spatial and velocity distributions of product desorption in carbon monoxide oxidation over palladium (110) and reconstructed platinum (110)(1×2) surfaces 283 (1993) 101
M. Nishijima, M. Fujisawa, T. Takaoka and T. Sekitani, The reaction of benzene with Pd(110) and Pd(110)(1×2)–Cs surfaces 283 (1993) 121
F. Budde, T.F. Heinz, A. Kalamarides, M.M.T. Loy and J.A. Misewich, Vibrational distributions in desorption induced by femtosecond laser pulses: coupling of adsorbate vibration to substrate electronic excitation 283 (1993) 143
H. Onishi, T. Aruga and Y. Iwasawa, An unusual adsorption state of hydrogen on the Pd(100)-p(2×2)-p4g-Al bimetallic surface 283 (1993) 213
A. Sellidj and B.E. Koel, CO chemisorption properties of ultrathin Pd films on Ta(110) 284 (1993) 139

Palladium (continued)
H. Itoh, S. Narui, H. Tanabe and T. Ichinokawa, Nucleation and surface reconstruction of Pd on Si(100) observed by scanning tunneling microscopy 284 (1993) 236
F. Solymosi, A. Berkó and Z. Tóth, Adsorption and dissociation of CH_3OH on clean and K-promoted Pd(100) surfaces 285 (1993) 197
E. Anno and T. Yamaguchi, Optical absorption of Ni and Pd particles: enhanced correlation interaction between conduction electrons 286 (1993) 168
D.M. Halstead and A.E. DePristo, Thin film growth and the scattering of atoms from surface island defects 286 (1993) 275
D. Hennig, S. Wilke, R. Löber and M. Methfessel, The adsorption of hydrogen on Pd(100) and Rh(100) surfaces: a comparative theoretical study 287/288 (1993) 89
S. Kawamoto, K. Saitoh, M. Hirai, M. Kusaka and M. Iwami, Study of the Pd/Si(100)2×1 system using soft X-rays 287/288 (1993) 151
H. Hirayama, A. de Meijere and E. Hasselbrink, The influence of lateral interactions on the angular distribution in photodesorption 287/288 (1993) 160
M. Krawczyk and W. Palczewska, A surface study on model Pd(111) catalyst modified with boron 287/288 (1993) 212
O. Rader, C. Carbone, W. Clemens, E. Vescovo, S. Blügel, W. Eberhardt and W. Gudat, Growth and magnetic behavior of Pd on Fe(100) 287/288 (1993) 736
G.G. Kleiman, R. Landers, S.G.C. de Castro and P.A.P. Nascente, Core-level Auger energy shifts in palladium alloys 287/288 (1993) 794
R. Landers, P.A.P. Nascente, S.G.C. de Castro and G.G. Kleiman, Bremsstrahlung-excited LMN and LMM Auger spectra of Nb, Mo, Pd, and Ag 287/288 (1993) 802
D.K. Flynn-Sanders, J.W. Evans and P.A. Thiel, Homoepitaxial growth on Pd(100) 289 (1993) 75
T.R. Ward, R. Hoffmann and M. Shelef, Coupling nitrosyls as the first step in the reduction of NO on metal surfaces: the special role of rhodium 289 (1993) 85
R. Lamber and N.I. Jaeger, Electron microscopy study of the interaction of Ni, Pd and Pt with carbon. III. Formation of a substitutional Pt–C carbide in ultrafine platinum particles 289 (1993) 247
Y.-W. Yang, J.C. Lin and T. Engel, Desorption kinetics of CO from epitaxial Pd films on W(110) in the low coverage limit 289 (1993) 267

Photodesorption
D. Liu, R.G. Albridge, A.V. Barnes, P.H. Bunton, C.S. Ewig, N.H. Tolk and M. Szymonski, The desorption of excited atoms by photon bombardment of alkali halide crystals 281 (1993) L353
B. Hellsing, Direct mechanism for photoinduced desorption and dissociation of O_2 on Pt(111) 282 (1993) 216
M.A. Schildbach and A.V. Hamza, Clean and water-covered sapphire ($1\bar{1}02$) surfaces: structure and laser-induced desorption 282 (1993) 306
T.N. Rhodin, C. Paulsen-Boaz and W.L. O'Brien, Dynamics of pulsed ultraviolet laser enhancement of the chlorine–Si(111) reaction 283 (1993) 109
K. Sawabe and Y. Matsumoto, Laser-induced photochemistry of nitrous oxide on a Pt(111) surface 283 (1993) 126
F. Budde, T.F. Heinz, A. Kalamarides, M.M.T. Loy and J.A. Misewich, Vibrational distributions in desorption induced by femtosecond laser pulses: coupling of adsorbate vibration to substrate electronic excitation 283 (1993) 143
K. Fukutani, A. Peremans, K. Mase and Y. Murata, Photo-stimulated desorption of NO from a Pt(001) surface 283 (1993) 158
Y. Nakai, K. Hattori, A. Okano, T. Taguchi, J. Kanasaki and N. Itoh, Defect initiated particle emission from semiconductor surfaces by laser irradiation 283 (1993) 169
R.W. Dreyfus, Interpreting laser ablation using cross sections 283 (1993) 177

Photodesorption (continued)
A. Peremans, K. Fukutani, K. Mase and Y. Murata, UV photodesorption of CO from Pt(001) at 193 nm investigated by state-selective detection 283 (1993) 189
H. Hirayama, A. de Meijere and E. Hasselbrink, The influence of lateral interactions on the angular distribution in photodesorption 287/288 (1993) 160
C.L.A. Lamont, H. Conrad and A.M. Bradshaw, The photodissociation of methyl bromide chemisorbed on Cu{111}: influence of pre-adsorbed bromine 287/288 (1993) 169
I. Ochiai, T. Ogawa, Y. Takakuwa and K. Mochiji, Photon-stimulated desorption from chemically treated Si surfaces 287/288 (1993) 175
P.J. Møller, S.A. Komolov and E.F. Lazneva, Laser-induced CO_2 desorption from a CO/Cu/ZnO(0001) surface 290 (1993) L677

Photoelectron spectroscopy
V.Yu. Aristov, M. Bertolo, P. Althainz and K. Jacobi, The Ag/n-InSb(110) interface at 10 K: first observation of an anomalous Fermi-level pinning 281 (1993) 74
E. Lundgren, J.N. Andersen, M. Qvarford and R. Nyholm, Layer dependent core level binding energy shifts: Na, K, Rb and Cs on Al(111) 281 (1993) 83
B. Ealet and E. Gillet, Palladium alumina interface: influence of the oxide stoichiometry studied by EELS and XPS 281 (1993) 91
J.C. Bertolini, J.L. Rousset, P. Miegge, J. Massardier, B. Tardy, Y. Samson, B.C. Khanra and C. Creemers, Surface segregation study of a dilute Pd_1Fe_{99} alloy by LEIS and XPS 281 (1993) 102
J.W. Erickson, W.M. Theis, T. Cole, A.K. Green and V. Rehn, Erratum to "A photoemission study of coherently strained In_xGa_{1-x}/InP(100)" [Surface Science 274 (1992) 363] 281 (1993) 220
U. Grosche, H. Hamadeh, O. Knauff, R. David and H.P. Bonzel, Orientation of adsorbed ethylene oxide on Ni(110) by X-ray photoelectron diffraction 281 (1993) L341
P. Dubot, E. Alleno, M.-G. Barthés-Labrousse, C. Binns, C. Nicklin, C. Norris and D. Ravot, Electronic properties of low-dimensional Sm films adsorbed on Cr(211) and Cr(110) 282 (1993) 1
R.S. Saiki, A.P. Kaduwela, M. Sagurton, J. Osterwalder, D.J. Friedman, C.S. Fadley and C.R. Brundle, X-ray photoelectron diffraction and low-energy electron diffraction study of the interaction of oxygen with the Ni(001) surface: c(2×2) to saturated oxide 282 (1993) 33
L.S. Caputi, R.G. Agostino, A. Amoddeo, E. Colavita and A. Santaniello, X-ray photoelectron diffraction study of CO- and NO-saturated Ni(111) 282 (1993) 62
S. Sugai, K. Takeuchi, T. Ban, H. Miki, K. Kawasaki and T. Kioka, Adsorption and dissociation of NO on Pt(100) and (310) studied by AES, UPS and XPS 282 (1993) 67
W.J. Wytenburg, R.M. Ormerod and R.M. Lambert, Growth and stability of ultra-thin aluminium films on Ag(110) and Ag(111) 282 (1993) 205
B. Sieben and H.P. Bonzel, Adsorption of H_2 and CO on Mn/Fe(110) surfaces 282 (1993) 246
A. Mesarwi and A. Ignatiev, Interaction of Y overlayers with the GaAs(100) surface and oxidation of the Y/GaAs interface 282 (1993) 371
K.H. Park, B.C. Kim and H. Kang, Kinetic energy dependence of N^+ and N_2^+ reactions with Si(100) 283 (1993) 73
H. Namba, T. Yamaguchi and H. Kuroda, Chemisorption and photo-decomposition of $(CH_3)_2GeH_2$ adsorbed on Si(100) studied by UPS and LEED 283 (1993) 132
S. Sato and Y. Ukisu, Mechanism of the photolysis of iron pentacarbonyl adsorbed on a Pt surface 283 (1993) 137
W.S. Fann, R. Storz, H.W.K. Tom and J. Bokor, Direct measurement of nonequilibrium electron-energy distributions in sub-picosecond laser-heated gold films 283 (1993) 221

Photoelectron spectroscopy (continued)

D.P. Woodruff, Structural studies of adsorbed and coadsorbed molecular species 283 (1993) 309

Y. Aiura, H. Yanashima, H. Fukutani, H. Kato, Y. Sakisaka, T. Maruyama and K. Edamoto, Hydrogen-induced reconstruction of a W(110) surface studied by angle-resolved photoemission spectroscopy 283 (1993) 344

T. Munakata and T. Kasuya, Laser based photoelectron spectromicroscope 283 (1993) 452

Y. Naoi, K. Ito, Y. Uehara and Y. Murata, Very high resolution photoelectron spectra of NEA-GaAs 283 (1993) 457

T.M. Grehk, C.U.S. Larsson, N.P. Prince and S.A. Flodström, Adsorption of lithium on the Si(111)7×7 surface studied with high resolution core-level spectroscopy 284 (1993) L384

K. Griffiths, W.N. Lennerd, I.V. Mitchell, P.R. Norton, G. Pirug and H.P. Bonzel, Saturated ethylene coverage on Pt(111): a comparison of nuclear reaction analysis and X-ray photoemission data 284 (1993) L389

H.B. Nielsen and W. Thowladda, Position and linewidth of the K-induced 4s resonance on Ag(100): a two-photon photo-emission study 284 (1993) L426

G.S. Herman, E.L. Bullock, M. Yamada, A.P. Kaduwela, D.J. Friedman, S. Thevuthasan, Y.J. Kim, T.T. Tran, C.S. Fadley, Th. Lindner, D.E. Ricken, A.W. Robinson and A.M. Bradshaw, A scanned-angle and scanned-energy photoelectron diffraction study of $(\sqrt{3} \times \sqrt{3})R30°$ Ag on Si(111) 284 (1993) 23

X. Xu, J.-W. He and D.W. Goodman, A surface spectroscopic study of metal–support interactions: model studies of copper on thin SiO_2 films 284 (1993) 103

B. Afsin, P.R. Davies, A. Pashusky, M.W. Roberts and D. Vincent, Reaction pathways in the oxydehydrogenation of ammonia at Cu(110) surfaces 284 (1993) 109

V.E. Henrich, Photoemission difference spectroscopy of semiconductors and insulators: assumptions and limitations 284 (1993) 200

A. Cassuto, S. Schmidt and Mane Mane, The interaction of potassium submonolayers adsorbed on Pt(111) with oxygen and the adsorption of ethylene on the resulting modified surfaces: a TDS and UPS study 284 (1993) 273

J.C.S. Chu, Y. Bu and M.C. Lin, Spectroscopy and reactions of hydrazoic acid on silicon single crystal surfaces. III. HN_3 and DN_3 on Si(111)(7×7) 284 (1993) 281

A. Klekamp and E. Umbach, Physisorption on an epitaxial NaCl(100) double-layer: SF_6 and xenon 284 (1993) 291

M. Ohno, P. Decleva and G. Fronzoni, Many-body calculations of the core excitation spectra of N_2 and NiN_2: inequivalent N atoms and disappearance of the giant shake-up satellite in NiN_2 284 (1993) 372

D.R. Mullins and P.F. Lyman, Sulfur-induced changes in the W(001) surface core level shift 285 (1993) L473

K.B. Ray, X. Pan and E.W. Plummer, The interaction of H with Be(0001): a photoemission investigation 285 (1993) 66

A. Hamawi and L. Walldén, Quantum size effect for Na films on Si(100) 285 (1993) 93

F. Solymosi, A. Berkó and Z. Tóth, Adsorption and dissociation of CH_3OH on clean and K-promoted Pd(100) surfaces 285 (1993) 197

A. Morgante, D. Cvetko, A. Santoni, K.C. Prince, V.R. Dhanak, G. Comelli and M. Kiskinova, A synchrotron radiation study of NO and oxygen on Rh(110) 285 (1993) 227

Y. Bu, J.C.S. Chu and M.C. Lin, Thermal stability of trimethyl indium on Si(100)(2×1) as studied with HREELS, UPS and XPS: a comparison with the results from Si(111)(7×7) and Si(110) studies 285 (1993) 243

R. Matzdorf, G. Meister and A. Goldmann, Temperature-dependent photoemission spectra from Cu(100) and Cu(111) surfaces 286 (1993) 56

T. Munakata, K. Mase and I. Kinoshita, Two-photon photoemission from NO adsorbed on Cu(111) 286 (1993) 73

Photoelectron spectroscopy (continued)
N.T. Barrett, B. Villette, A. Senhaji, C. Guillot, R. Belkhou, G. Tréglia and B. Legrand, Experimental study of the growth and dissolution of Re/W(110) by core level photoemission spectroscopy: formation of a surface alloy 286 (1993) 150
Z.-M. Liu, X.-L. Zhou, J. Kiss and J.M. White, Interaction of CF_3I with Pt(111) 286 (1993) 233
Y.B. Zhao, J.E. Whitten and R. Gomer, Electron stimulated desorption of hydrogen from W(110) 286 (1993) 290
G. Pacchioni and P.S. Bagus, Alkali adsorbates on metal surfaces: observable consequences of the ionic K/Cu(100) interaction 286 (1993) 317
A. Aničić and B. Gumhalter, Irreversible energy transfer in ionization of physisorbed adsorbates. II. Inelastic energy spectra of temporarily ionized adatoms 287/288 (1993) 39
D.E.A. Gordon and R.M. Lambert, CO_2 adsorption on oxygen-modified Ni(111) 287/288 (1993) 114
T. Almeida, L.E. Cox, J.W. Ward and J.R. Naegele, Gas adsorption studies on Pu metal by photoemission spectroscopy 287/288 (1993) 141
U. Schneider, G.R. Castro and K. Wandelt, Adsorption on ordered $Cu_3Pt(111)$: site selectivity 287/288 (1993) 146
S. Kawamoto, K. Saitoh, M. Hirai, M. Kusaka and M. Iwami, Study of the Pd/Si(100)2×1 system using soft X-rays 287/288 (1993) 151
S. Zhuang, M. Ji, J. Wu, X. Liu, J. Tu and K. Wandelt, The adsorption of chlorine on an $Fe_{64}Ni_{36}(100)$ surface 287/288 (1993) 260
M. Canepa, P. Cantini, L. Mattera, M. Salvietti, S. Terreni and F. Valdenazzi, Water dissociation on O(n×1)–Ag(110) phases 287/288 (1993) 273
A. Ishii and T. Aisaka, Dynamical calculation of an ARUPS spectrum for a Si(100)(2×1) surface 287/288 (1993) 299
M. Alnot and J.J. Ehrhardt, Pt(110)(1×1) surfaces prepared by low temperature platinum deposition: surface characterization and stability 287/288 (1993) 325
J. Radnik, F. Gitmans, B. Pennemann, K. Oster and K. Wandelt, Adsorbate-induced structure transitions at the reconstructed Pt(100) surface 287/288 (1993) 330
T. Hikita, T. Hanada, M. Kudo and M. Kawai, Structure and electronic state of the TiO_2 and SrO terminated $SrTiO_3(100)$ surfaces 287/288 (1993) 377
H. Tochihara and S. Mizuno, Geometries of Li induced structures on Cu(001): LEED and ARUPS studies 287/288 (1993) 423
S. Sugai, K. Shimizu, H. Watanabe, H. Miki, K. Kawasaki and T. Kioka, Chemisorption of NO on Pt(210) studied by UPS, XPS and AES 287/288 (1993) 455
A. Cassuto, Mane Mane, G. Tourillon, P. Parent and J. Jupille, Compared bonding geometries of C_2H_4 and C_3H_6 on K-covered Pt(111) surfaces 287/288 (1993) 460
R. Dippel, K.-U. Weiss, K.-M. Schindler, D.P. Woodruff, P. Gardner, V. Fritzsche, A.M. Bradshaw and M.C. Asensio, Multiple site coincidences and their resolution in photoelectron diffraction: PF_3 adsorbed on Ni(111) 287/288 (1993) 465
M. Weinelt, P. Zebisch and H.-P. Steinrück, A multimethod-investigation of the adsorption of ethylene oxide on Ni(110) 287/288 (1993) 471
R. Haight and M. Baeumler, Ultrafast electron dynamics at the Ge(111) surface investigated with subpicosecond laser photoemission 287/288 (1993) 482
J. Alvarez, J.J. Hinarejos, E.G. Michel and R. Miranda, Determination of the Fe/Si(111) phase diagram by means of photoelectron spectroscopies 287/288 (1993) 490
M. Seelmann-Eggebert, G.P. Carey, R. Klauser and H.J. Richter, A case study for XPD in the presence of a compositional depth profile: interface formation between metals (Ag, Al) and HgCdTe 287/288 (1993) 495
L. Kipp, C. Sellmer, R. Manzke and M. Skibowski, Unoccupied electronic states of Ge(001)2×1 by constant initial band photoemission 287/288 (1993) 520
L.S.O. Johansson and B. Reihl, Alkali metals on Si(100)2×1: comparative study of the surface electronic structures for Li, Na and K adsorption 287/288 (1993) 524

Photoelectron spectroscopy (continued)

E. Landemark, C.J. Karlsson, Y.-C. Chao and R.I.G. Uhrberg, Dimer structure of the Si(001)2×1 and c(4×2) reconstructions derived from core-level and valence-band photoemission results 287/288 (1993) 529

G. Le Lay, R.L. Johnson, R. Seemann, F. Grey, R. Feidenhans'l and M. Nielsen, Electronic and crystallographic structures of 2D silver adlayers on Ge(111) 287/288 (1993) 539

R. Whittle, E. Dudzik, I.T. McGovern, D.R.T. Zahn, C. Nowak, A. Cafolla and W. Braun, Surface electronic structure of monolayer Bi on InP(110) 287/288 (1993) 554

S. Löbus, M. Lau, R. Courths and S. Halilov, The Tamm surface state on ordered $Cu_3Au(001)$ 287/288 (1993) 568

W. Kuch, M. Schulze, W. Schnurnberger and K. Bolwin, XPS lineshape analysis of potassium coadsorbed with water on Ni(111) 287/288 (1993) 600

A. Nagashima, K. Nuka, K. Satoh, H. Itoh, T. Ichinokawa, C. Oshima and S. Otani, Electronic structure of monolayer graphite on some transition metal carbide surfaces 287/288 (1993) 609

R. Dudde and B. Reihl, Electronic structure of alkali-metal monolayers on Cu(111) 287/288 (1993) 614

H.I. Starnberg, P.O. Nilsson and H.P. Hughes, Adsorbate induced enhancement of secondary electron emission from the layered compound VSe_2 287/288 (1993) 627

I.L. Bolotin, V.A. Grazhulis, A.M. Ionov, S.G. Karabashev and D.A. Shuliatev, Electron spectroscopy for $(001)Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4}$ $(n=1,2)$; comparative studies 287/288 (1993) 630

H. Guyot, Study of the electronic structure of $Ba(Pb, Bi)O_{3-\delta}$ single crystals 287/288 (1993) 633

T.N. Rhodin, B.G. Frederick and G. Apai, Electronic, vibrational and chemical properties of alumina surfaces 287/288 (1993) 638

F.H. Potter and R.G. Egdell, Electronic defect states at $Na_xWO_3(100)$ surfaces 287/288 (1993) 649

R. Heise and R. Courths, Examination of the electronic structure of $TiO_2(110)$ using photoelectron diffraction 287/288 (1993) 658

M.N. Mikheeva, V.G. Nazin, A.V. Svishchev, D.S.-L. Law, T.S. Turner, P. Bailey, D. Teehan, S.N. Barilo and P.V. Gritskov, Low temperature photoemission study of La_2CuO_{4+x} single crystals 287/288 (1993) 662

K. Edamoto, T. Anazawa, E. Miyazaki, H. Kato and S. Otani, Chemisorption state of atomic oxygen on TiC(100) surface: angle-resolved photoemission study 287/288 (1993) 667

D. Samuelsen, A. Yang and W. Schattke, Detection of the longitudinal photon field in surface screening 287/288 (1993) 676

O. Rader, C. Carbone, W. Clemens, E. Vescovo, S. Blügel, W. Eberhardt and W. Gudat, Growth and magnetic behavior of Pd on Fe(100) 287/288 (1993) 736

A. Nilsson, O. Björneholm, H. Tillborg, B. Hernnäs, R.J. Guest, A. Sandell, R.E. Palmer and N. Mårtensson, Core level spectroscopy of physisorbed molecules on graphite 287/288 (1993) 758

H.I. Starnberg and P.O. Nilsson, Thermal effects in angle-resolved photoemission: is it possible to separate direct and indirect transitions? 287/288 (1993) 776

M. Said, M.C. Desjonquères and D. Spanjaard, Core level shifts at bcc transition metal surfaces deduced from the calculation of surface segregation energies 287/288 (1993) 780

M. Methfessel, D. Hennig and M. Scheffler, Ab-initio calculations of the initial- and final-state effects on the surface core-level shift of transition metals 287/288 (1993) 785

Y. Baba, H. Yamamoto and T.A. Sasaki, Core-level electronic structures of rare-gas atoms implanted in transition metals studied by XPS and XAES 287/288 (1993) 806

U. Diebold, J.-M. Pan and T.E. Madey, Ultrathin metal films on $TiO_2(110)$: metal overlayer spreading and surface reactivity 287/288 (1993) 896

A. Bot, U. van Slooten, W.R. Koppers and A.W. Kleyn, Surface diffusion during thin film annealing studied by XPS 287/288 (1993) 901

Photoelectron spectroscopy (continued)
D. Rouyer, C. Krembel, M.C. Hanf, D. Bolmont and G. Gewinner, X-ray photoelectron diffraction from ultra-thin Cr layers on Au(100) and Ag(100): a comparison 287/288 (1993) 935
D. Naumović, J. Osterwalder, A. Stuck, P. Aebi and L. Schlapbach, Growth of Au on Cu(001) studied by full hemispherical photoelectron diffraction 287/288 (1993) 950
K. Marre and H. Neddermeyer, Growth of ordered thin films of NiO on Ag(100) and Au(111) 287/288 (1993) 995
C. Capasso, W. Ng, A.K. Ray-Chaudhuri, S.H. Liang, R.K. Cole, Z.Y. Guo, J. Wallace, F. Cerrina, J. Underwood, R. Perera, J. Kortright, G. De Stasio and G. Margaritondo, Scanning photoemission microscopy on MAXIMUM reaches 0.1 micron resolution 287/288 (1993) 1046
K. Ninomiya and M. Hasegawa, Lateral resolution of microscopic X-ray photoelectron spectroscopy using a focused soft X-ray beam 287/288 (1993) 1051
G. Moretti and P. Porta, Application of the Auger parameter in the characterization of small copper particles supported on insulators 287/288 (1993) 1076
J.A. Rodriguez, The chemical properties of bimetallic surfaces: bonding between CO and Zn on Ru(001) 289 (1993) L584
L.S. Caputi, R.G. Agostino, A.Amoddeo, S. Molinaro, G. Chiarello, E. Colavita and A. Santaniello, Orientational study of low coverage CO and NO on Ni(111) 289 (1993) L591
J. Prasad, E. Murray and J.A. Kelber, Site selective chemistry of S, Cl and H_2O at the iron oxide surface 289 (1993) 10
S. Tjandra and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255
C. Wigren, J.N. Andersen, R. Nyholm and U.O. Karlsson, Epitaxial silicide formation in the Mg/Si(111) system 289 (1993) 290
L.S. Dake and R.J. Lad, Electronic and chemical interactions at aluminum/TiO_2(110) interfaces 289 (1993) 297
J.N. Andersen, E. Lundgren, R. Nyholm and M. Qvarford, Alkali metal adsorption on Al(111) 289 (1993) 307
G.S. Herman, J.C. Woicik, A.B. Andrews and J.L. Erskine, High-resolution photoelectron spectroscopy study of $(\sqrt{3} \times \sqrt{3})$R30°-Ag on Si(111) 290 (1993) L643
S. Imaduddin and R.J. Lad, Aluminum deposition on NiO(100): growth, structure and composition of the interface 290 (1993) 35
X. Shi, D. Tang, D. Heskett, K.-D. Tsuei, H. Ishida and Y. Morikawa, Coverage-dependent core level photoemission investigations of Na/Cu(111) and Na/Ni(111) 290 (1993) 69
C.-S. Zhang, F.J. Esposto, B.J. Flinn, P.R. Norton and R.S. Timsit, The influence of Li surface segregation on the initial oxidation of an Al–Li alloy at room temperature 290 (1993) 103
P.G. Strupp, P.C. Stair and E. Weitz, Three-photon photoemission from Cu(100): observation of an unoccupied surface state near $\bar{\Gamma}$ 290 (1993) L699
K. Prabhakaran, Y. Kobayashi and T. Ogino, Chemically prepared oxides on Si(001): an XPS study 290 (1993) 239
K. Kishi, K. Hirai and T. Yamamoto, XPS and XAES study for oxidation of V/Cu(100) and V, Na/Cu(100) surfaces 290 (1993) 309

Photon emission
R. Persaud and R.H. Prince, An inverse photoemission study of CO overlayers on Ru(0001) 282 (1993) 91
N. Memmel, G. Rangelov and E. Bertel, Influence of the substrate on the band structure of alkali metal monolayers 285 (1993) 109

Photon emission (continued)
M. Finazzi, L. Duò, G. Bacchin, F. Ciccacci and E. Puppin, Ultraviolet inverse photoemission study of the oxidation of Fe, Co and Ni 287/288 (1993) 264
R. Dudde and B. Reihl, Electronic structure of alkali-metal monolayers on Cu(111) 287/288 (1993) 614
A.E. Taverner, P.C. Hollamby, P.S. Aldridge, R.G. Egdell and W.C. Mackrodt, An inverse photoemission study of empty electronic states in TiO_2 287/288 (1993) 653
D. Lovrić and B. Gumhalter, "Fast" and "slow" screening effects in inverse photoemission spectra of CO/Cu(110) 287/288 (1993) 789

Physisorption, see also Adsorption isotherms
A. Klekamp and E. Umbach, Physisorption on an epitaxial NaCl(100) double-layer: SF_6 and xenon 284 (1993) 291

Platinum
A. Tonscheidt, P.L. Ryder, N.I. Jaeger and G. Schulz-Ekloff, Orientation and morphology of iridium, rhodium and platinum nanocrystals in zeolite X 281 (1993) 51
R.J. Smith, A. Kara and S. Holloway, A molecular dynamics study for the trapping and scattering of Ar/Pt(111) 281 (1993) 296
S. Sugai, K. Takeuchi, T. Ban, H. Miki, K. Kawasaki and T. Kioka, Adsorption and dissociation of NO on Pt(100) and (310) studied by AES, UPS and XPS 282 (1993) 67
J. Fan and M. Trenary, The influence of coadsorbates on the overlayer structure of PF_3 on Pt(111) 282 (1993) 76
U. Bardi, A. Atrei, B. Cortigiani, G. Rovida and M. Torrini, X-ray photoelectron diffraction study of an oxidized Pt–Co(001) alloy surface: evidence for atomic scale rippling of the CoO overlayer 282 (1993) L365
B. Hellsing, Direct mechanism for photoinduced desorption and dissociation of O_2 on Pt(111) 282 (1993) 216
R. Souda, W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Chemical effects on dynamical charge transfer: D^+ on K-adsorbed Pt(111), Si(100) and Si(111) surfaces 283 (1993) 36
K. Kunimori, H. Uetsuka, T. Iwade, T. Watanabe and S. Ito, Infrared chemiluminescence of CO and CO_2 produced by molecular-beam surface reactions 283 (1993) 58
H.H. Rotermund, Investigation of dynamic processes in adsorbed layers by photoemission electron microscopy (PEEM) 283 (1993) 87
K. Sawabe and Y. Matsumoto, Laser-induced photochemistry of nitrous oxide on a Pt(111) surface 283 (1993) 126
S. Sato and Y. Ukisu, Mechanism of the photolysis of iron pentacarbonyl adsorbed on a Pt surface 283 (1993) 137
K. Fukutani, A. Peremans, K. Mase and Y. Murata, Photo-stimulated desorption of NO from a Pt(001) surface 283 (1993) 158
A. Peremans, K. Fukutani, K. Mase and Y. Murata, UV photodesorption of CO from Pt(001) at 193 nm investigated by state-selective detection 283 (1993) 189
R.R. Cavanagh, E.J. Heilweil and J.C. Stephenson, Time-resolved probes of surface dynamics 283 (1993) 226
M. Nakamura, H. Ogasawara, J. Inukai and M. Ito, CO migration on Pt(100) and Pt(11 1 1) surfaces studied by time resolved infrared reflection–adsorption spectroscopy 283 (1993) 248
D.L. Abernathy, D. Gibbs, G. Grübel, K.G. Huang, S.G.J. Mochrie, A.R. Sandy and D.M. Zehner, Reconstruction of the (111) and (001) surfaces of Au and Pt: thermal behavior 283 (1993) 260

Platinum (continued)
K. Griffiths, W.N. Lennerd, I.V. Mitchell, P.R. Norton, G. Pirug and H.P. Bonzel, Saturated ethylene coverage on Pt(111): a comparison of nuclear reaction analysis and X-ray photoemission data 284 (1993) L389
J. Schmidt, Ch. Stuhlmann and H. Ibach, Oxygen adsorption on the Pt(110)(1×2) surface studied with EELS 284 (1993) 121
A. Cassuto, S. Schmidt and Mane Mane, The interaction of potassium submonolayers adsorbed on Pt(111) with oxygen and the adsorption of ethylene on the resulting modified surfaces: a TDS and UPS study 284 (1993) 273
D.H. Fairbrother, X.D. Peng, R. Viswanathan, P.C. Stair, M. Trenary and J. Fan, Carbon–carbon coupling of methyl groups on Pt(111) 285 (1993) L455
P. Zeppenfeld, K. Kern, R. David, U. Becher and G. Comsa, Mixtures of Kr and Xe physisorbed on Pt(111): a prototype of a stochastic two-dimensional alloy 285 (1993) L461
U. Starke, A. Barbieri, N. Materer, M.A. Van Hove and G.A. Somorjai, Ethylidyne on Pt(111): determination of adsorption site, substrate relaxation and coverage by automated tensor LEED 286 (1993) 1
R.K. Brandt, M.R. Hughes, L.P. Bourget, K. Truszkowska and R.G. Greenler, The interpretation of CO adsorbed on Pt/SiO_2 of two different particle-size distributions 286 (1993) 15
V.M. Hallmark and S. Chiang, Imaging structural details in closely related molecular adsorbate systems 286 (1993) 190
V.A. Ukraintsev and I. Harrison, Methane dissociative chemisorption on Pt(111) explored by microscopic reversibility 286 (1993) L571
M. Tüshaus, P. Gardner and A.M. Bradshaw, A high resolution vibrational spectroscopic study of CO/K coadsorption on Pt{111} 286 (1993) 212
Z.-M. Liu, X.-L. Zhou, J. Kiss and J.M. White, Interaction of CF_3I with Pt(111) 286 (1993) 233
N. Kizhakevariam and E.M. Stuve, Promotion and poisoning of the reaction of methanol on clean and modified platinum (100) 286 (1993) 246
G. Ertl, Self-organization in reactions at surfaces 287/288 (1993) 1
T. Matsushima, Y. Ohno and J.-I. Murakami, Spatial and velocity distributions of desorbing product carbon dioxide over a reconstructed platinum (110)(1×2) surface 287/288 (1993) 192
M.F.H. van Tol, A. Gielbert, R.M. Wolf, A.B.K. Lie and B.E. Nieuwenhuys, The striking difference in the behaviour of Rh and Pt towards their interaction with CO_2 287/288 (1993) 201
B. Rausenberger, W. Święch, W. Engel, A.M. Bradshaw and E. Zeitler, LEEM and selected-area LEED studies of reaction from propagation 287/288 (1993) 235
E. Poehlmann, M. Schmitt, H. Hoinkes and H. Wilsch, Velocity distributions of carbondioxide molecules from the oxidation of CO on Pt(111) 287/288 (1993) 269
A.R. Sandy, S.G.J. Mochrie, D.M. Zehner, G. Grübel, K.G. Huang and D. Gibbs, Au(111) and Pt(111) surface phase behavior 287/288 (1993) 321
M. Alnot and J.J. Ehrhardt, Pt(110)(1×1) surfaces prepared by low temperature platinum deposition: surface characterization and stability 287/288 (1993) 325
J. Radnik, F. Gitmans, B. Pennemann, K. Oster and K. Wandelt, Adsorbate-induced structure transitions at the reconstructed Pt(100) surface 287/288 (1993) 330
G. Hilgers, M. Potthoff, N. Müller and U. Heinzmann, Structural investigations on Xe/Pd(111) with spin-polarized LEED 287/288 (1993) 414
U. Starke, N. Materer, A. Barbieri, R. Döll, K. Heinz, M.A. Van Hove and G.A. Somorjai, A low-energy electron diffraction study of oxygen, water and ice adsorption on Pt(111) 287/288 (1993) 432
H. Miki, T. Nagase, K. Sato, H. Watanabe, S. Sugai, K. Kawasaki and T. Kioka, Structure of Pt(100) for NO adsorption studied by FEM and LEED 287/288 (1993) 448

Platinum (continued)
S. Sugai, K. Shimizu, H. Watanabe, H. Miki, K. Kawasaki and T. Kioka, Chemisorption of NO on Pt(210) studied by UPS, XPS and AES 287/288 (1993) 455
A. Cassuto, Mane Mane, G. Tourillon, P. Parent and J. Jupille, Compared bonding geometries of C_2H_4 and C_3H_6 on K-covered Pt(111) surfaces 287/288 (1993) 460
G. Grübel, D. Gibbs, D.M. Zehner, D.L. Abernathy, A.R. Sandy and S.G.J. Mochrie, Phase behavior of Au and Pt surfaces 287/288 (1993) 842
T.R. Ward, R. Hoffmann and M. Shelef, Coupling nitrosyls as the first step in the reduction of NO on metal surfaces: the special role of rhodium 289 (1993) 85
J.M. Feliu, R. Gómez, M.J. Llorca and A. Aldaz, Electrochemical behavior of irreversibly adsorbed selenium dosed from solution on Pt(*h, k, l*) single crystal electrodes in sulphuric and perchloric acid media 289 (1993) 152
D.P. Land, W. Erley and H. Ibach, HREELS investigation of the orientation and dehydrogenation of cyclohexane on Pt[111] 289 (1993) 237
R. Lamber and N.I. Jaeger, Electron microscopy study of the interaction of Ni, Pd and Pt with carbon. III. Formation of a substitutional Pt–C carbide in ultrafine platinum particles 289 (1993) 247
M.B. Jensen, U. Myler and P.A. Thiel, Local and collective structure of formate on Pt(111) 290 (1993) L655
M. Croci, C. Félix, G. Vandoni, W. Harbich and R. Monot, Measurement of macroscopic diffusion of CO on Pt(111) by thermal helium scattering 290 (1993) L667
A. Atrei, U. Bardi, J.X. Wu, E. Zanazzi and G. Rovida, LEED crystallographic investigation of ultrathin films formed by deposition of Sn on the Pt(111) surface 290 (1993) 286
G.L. Kellogg, The effect of an externally applied electric field on the reconstruction of Pt(110) 290 (1993) 295

Polymers
U. Albrecht, A. Otto and P. Leiderer, Diffusive two-dimensional spreading of a polymer 283 (1993) 383
Q. Zhong, D. Inniss, K. Kjoller and V.B. Elings, Fractured polymer/silica fiber surface studied by tapping mode atomic force microscopy 290 (1993) L688

Positron spectroscopy
A. Ishii and Y. Murata, Theory of adsorbate-sensitive positronium formation and its application to ion desorption 283 (1993) 462
A. Ishii, Theory of position sensitivity of positronium formation at surfaces and its application to determine adsorbate positions 287/288 (1993) 811

Raman scattering
K.G. Nakamura and M. Kitajima, Time-resolved Raman measurements of a graphite surface under ion irradiation 283 (1993) 255
M. Sekoguchi, Y. Uehara and S. Ushioda, Combined Raman/HREELS study of ZnSe–ZnS strained-layer superlattices 283 (1993) 355
B.H. Loo and T. Kato, The bonding of acrylonitrile molecules to copper surfaces 284 (1993) 167
W. Akemann and A. Otto, The effect of atomic scale surface disorder on bonding and activation of adsorbates: vibrational properties of CO and CO_2 on copper 287/288 (1993) 104

Reflection spectroscopy
K. Hingerl, D.E. Aspnes and I. Kamiya, Comparison of reflectance difference spectroscopy and surface photoabsorption used for the investigation of anisotropic surfaces 287/288 (1993) 686

Reflection spectroscopy (continued)
Y. Okuno, M. Kuwahara, M. Fukui and Y. Shintani, The effects of residual gases on optical constants of Al films 290 (1993) 421

Resistance, see Conductivity, Surface conductivity

Rhenium
N.T. Barrett, B. Villette, A. Senhaji, C. Guillot, R. Belkhou, G. Tréglia and B. Legrand, Experimental study of the growth and dissolution of Re/W(110) by core level photoemission spectroscopy: formation of a surface alloy 286 (1993) 150

Rhodium
A.F. Bellman, D. Cvetko, A. Morgante, M. Polli, F. Tommasini, K.C. Prince and R. Rosei, The (2×2) p2mg to (1×2) O/Rh(110) phase transition 281 (1993) L321
W. Liu, J.R. Lou and K.A.R. Mitchell, LEED crystallographic studies for the Rh(100)-p(2×2)-S and Rh(100)-c(2×2)-S surface structures 281 (1993) 21
C.J. Barnes, A. Wander and D.A. King, A tensor LEED structural study of the coverage-dependent bonding of iodine adsorbed on Rh{111} 281 (1993) 33
A. Wander, C.J. Barnes, L.D. Mapledoram and D.A. King, Structural transitions in ultra-thin nickel films on Rh{111} 281 (1993) 42
A. Tonscheidt, P.L. Ryder, N.I. Jaeger and G. Schulz-Ekloff, Orientation and morphology of iridium, rhodium and platinum nanocrystals in zeolite X 281 (1993) 51
I. Pápai, J. Ushio and D.R. Salahub, Chemisorption of formate and acetate on cluster models of Rh and bimetallic RhSn clusters 282 (1993) 262
A.F. Bellman, D. Cvetko, A. Morgante, M. Polli, F. Tommasini, V.R. Dhanak, A. Lausi, K.C. Prince, R. Rosei, P. Cortona and M.G. Dondi, He scattering from Rh(110) 282 (1993) 273
M. Nakamura, M. Tsukada and M. Aono, Interaction of low-velocity rare-gas ions with a solid surface 283 (1993) 46
C. Egawa, Y. Tezuka, S. Oki and Y. Murata, Structures of ultra-thin Fe overlayers on a Rh(001) surface 283 (1993) 338
Y. Li and M. Bowker, Acetate formation, stabilisation and surface explosion on Rh(111) 285 (1993) 219
A. Morgante, D. Cvetko, A. Santoni, K.C. Prince, V.R. Dhanak, G. Comelli and M. Kiskinova, A synchrotron radiation study of NO and oxygen on Rh(110) 285 (1993) 227
G. Hoogers and D.A. King, Adsorbate-induced step-doubling reconstruction of a vicinal metal surface: oxygen on Rh{332} 286 (1993) 306
L. Hammer, W. Nichtl-Pecher, N. Elbel, W. Stammler, K. Heinz and K. Müller, Phase diagram for hydrogen adsorption on Rh(311) 287/288 (1993) 84
D. Hennig, S. Wilke, R. Löber and M. Methfessel, The adsorption of hydrogen on Pd(100) and Rh(100) surfaces: a comparative theoretical study 287/288 (1993) 89
M.F.H. van Tol, A. Gielbert, R.M. Wolf, A.B.K. Lie and B.E. Nieuwenhuys, The striking difference in the behaviour of Rh and Pt towards their interaction with CO_2 287/288 (1993) 201
J.P. Warren, X. Zhang, J.E.T. Andersen and R.M. Lambert, Growth of Ce on Rh, surface alloy formation and the preparation and properties of Rh/ceria model planar catalysts 287/288 (1993) 222
T.R. Ward, R. Hoffmann and M. Shelef, Coupling nitrosyls as the first step in the reduction of NO on metal surfaces: the special role of rhodium 289 (1993) 85

Ruthenium

R. Persaud and R.H. Prince, An inverse photoemission study of CO overlayers on Ru(0001) 282 (1993) 91

A. Ludviksson, C. Huang, H.J. Jänsch and R.M. Martin, Isotopic studies of the reaction of NO on silver surfaces 284 (1993) 328

K.L. Kostov, H. Rauscher and D. Menzel, The role of coadsorbed oxygen in NCO formation on Ru(001) 287/288 (1993) 283

M. Sokolowski and H. Pfnür, Critical behaviour of the p(2×2) and $(\sqrt{3} \times \sqrt{3})$R30° order–disorder phase transitions of S/Ru(001) 287/288 (1993) 831

M. Schick, J. Schäfer, K. Kalki, G. Ceballos, P. Reinhardt, H. Hoffschulz and K. Wandelt, Miscibility within monolayer Ag–Cu films on Ru(0001) 287/288 (1993) 960

S. Poulston, M. Tikhov and R.M. Lambert, Oxygen chemisorption on lead and gold precovered Ru(100) surfaces 287/288 (1993) 969

M. Schmidt, H. Wolter, M. Schick, K. Kalki and K. Wandelt, Compression phases in copper/oxygen coadsorption layers on a Ru(0001) surface 287/288 (1993) 983

Y. Wang and W.H. Weinberg, Enhancing the resolution of electron energy loss spectroscopy by digital signal processing techniques 287/288 (1993) 1102

Second harmonic generation

K. Domen, N. Akamatsu, H. Yamamoto, A. Wada and C. Hirose, Infrared-visible sum frequency generation study of HCOOH on an MgO(001) surface 283 (1993) 468

E. Leiva, W. Schmickler and M. Urbakh, Second harmonic generation and the microscopic structure of the metal–electrolyte interface 287/288 (1993) 681

M. Cini, R. Del Sole and L. Reining, Theory of second-harmonic generation at semiconductor surfaces 287/288 (1993) 693

G.G. Malliaras, H.A. Wierenga and Th. Rasing, Study of the step structure of vicinal Si(110) surfaces using optical second harmonic generation 287/288 (1993) 703

J.R. Power and J.F. McGilp, Resonance in the optical second harmonic response from the Si(111)–Sb interface 287/288 (1993) 708

J.D. O'Mahony, J.F. McGilp, M.H.W. Verbruggen and C.F.J. Flipse, Au structures on Si(111) studied by spectroscopic ellipsometry and optical second harmonic generation 287/288 (1993) 713

G. Spierings, V. Koutsos, H.A. Wierenga, M.W.J. Prins, D.L. Abraham and Th. Rasing, Optical second harmonic generation study of interface magnetism 287/288 (1993) 747

Secondary ion mass spectroscopy

S.A. Larson and L.L. Lauderback, Oxidation kinetics of the top atomic layer of Al(100) from angle resolved SIMS 284 (1993) 1

J. Lin, A.T.S. Wee, A.C.H. Huan and K.L. Tan, SIMS study of the formic acid adsorption on polycrystalline copper and CuCl(111) surfaces 285 (1993) 31

S. Tjandra and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255

M.A. Karolewski and R.G. Cavell, Characterization by SIMS of Brønsted acid chemisorption on MgO(100) and Cs/MgO(100) 290 (1993) 80

F.J. Esposto, C.-S. Zhang, P.R. Norton and R.S. Timsit, Segregation studies of an Al–Li alloy 290 (1993) 93

C.-S. Zhang, F.J. Esposto, B.J. Flinn, P.R. Norton and R.S. Timsit, The influence of Li surface segregation on the initial oxidation of an Al–Li alloy at room temperature 290 (1993) 103

Selenium
J.M. Feliu, R. Gómez, M.J. Llorca and A. Aldaz, Electrochemical behavior of irreversibly adsorbed selenium dosed from solution on Pt(*h, k, l*) single crystal electrodes in sulphuric and perchloric acid media 289 (1993) 152

Semiconductor–electrolyte interface, see Solid–electrolyte interface

Semiconductors
V.E. Henrich, Photoemission difference spectroscopy of semiconductors and insulators: assumptions and limitations 284 (1993) 200
M. Cini, R. Del Sole and L. Reining, Theory of second-harmonic generation at semiconductor surfaces 287/288 (1993) 693

Silica, see Silicon oxide

Silicides
S. Itoh and T. Fujiwara, Surface electronic structures of refractory-metal disilicides 282 (1993) 122
W. Raunau, H. Niehus and G. Comsa, Epitaxial iron silicides on Si(001): an investigation with scanning tunneling microscopy and spectroscopy 284 (1993) L375
H. Itoh, S. Narui, H. Tanabe and T. Ichinokawa, Nucleation and surface reconstruction of Pd on Si(100) observed by scanning tunneling microscopy 284 (1993) 236
N. Motta, A. Sgarlata, G. Gaggiotti, F. Patella, A. Balzarotti and M. De Crescenzi, Iron disilicide growth on Si(111): a scanning tunneling microscopy investigation 284 (1993) 257
J.K.N. Sharma, B.R. Chakraborty and S. Bera, Study of oxidation and silicidation of Ta by electron impact autoionization process 285 (1993) 237
W. Raunau, H. Niehus, Th. Schilling and G. Comsa, Scanning tunneling microscopy and spectroscopy of iron silicide epitaxially grown on Si(111) 286 (1993) 203
S. Kawamoto, K. Saitoh, M. Hirai, M. Kusaka and M. Iwami, Study of the Pd/Si(100)2×1 system using soft X-rays 287/288 (1993) 151
H. Sirringhaus, N. Onda, E. Müller-Gubler, P. Müller, St. Zehnder and H. von Känel, Fundamental phenomena in heteroepitaxial growth studied by scanning tunneling microscopy 287/288 (1993) 1019
C. Wigren, J.N. Andersen, R. Nyholm and U.O. Karlsson, Epitaxial silicide formation in the Mg/Si(111) system 289 (1993) 290
J. Vrijmoeth, P.M. Zagwijn, E. Vlieg, J.W.M. Frenken and P.F.A. Alkemade, Structure determination of the $NiSi_2$(111) surface with medium-energy ion backscattering from individual monolayers 290 (1993) 255

Silicon
D.G. Li, N.S. McAlpine and D. Haneman, Surface barriers and potentials from luminescence on cleaved Si, GaAs, and InP 281 (1993) L315
Y. Yamamoto, RHEED–TRAXS study of superstructures induced by Ge and Sn adsorption on a Si(110) surface 281 (1993) 253
S. Surnev, Interaction of oxygen with a Ge-covered Si(100) surface 282 (1993) 10
T. Takahashi and S. Nakatani, Refinement of the Si(111)$\sqrt{3} \times \sqrt{3}$–Ag structure by surface X-ray diffraction 282 (1993) 17
T. Uchiyama and M. Tsukada, Step-induced state of a Si(001) reconstructed surface 282 (1993) 152
H. Nagayoshi, Theoretical study of the electronic structure of the Si(111)$\sqrt{3}\times\sqrt{3}$:Sb surface 282 (1993) 163
X.M. Zheng and P.V. Smith, Hydrogen chemisorption on the Si(111) surface 282 (1993) 173
W. Bock, H. Gnaser and H. Oechsner, Modification of crystalline semiconductor surfaces by low-energy Ar^+ bombardment: Si(111) and Ge(100) 282 (1993) 333

Silicon (continued)

A. Namiki, S. Suzuki, H. Kato, T. Nakamura and T. Suzaki, Dynamical study of alkali promotion of NO sticking on Si(100) 283 (1993) 9

R. Souda, W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Chemical effects on dynamical charge transfer: D^+ on K-adsorbed Pt(111), Si(100) and Si(111) surfaces 283 (1993) 36

J. Matsuo, F. Yannick and K. Karahashi, Reaction kinetics of chlorine on Si(111)7×7 surfaces 283 (1993) 52

K.H. Park, B.C. Kim and H. Kang, Kinetic energy dependence of N^+ and N_2^+ reactions with Si(100) 283 (1993) 73

T.N. Rhodin, C. Paulsen-Boaz and W.L. O'Brien, Dynamics of pulsed ultraviolet laser enhancement of the chlorine–Si(111) reaction 283 (1993) 109

H. Namba, T. Yamaguchi and H. Kuroda, Chemisorption and photo-decomposition of $(CH_3)_2GeH_2$ adsorbed on Si(100) studied by UPS and LEED 283 (1993) 132

K. Ueda, S. Kodama and A. Takano, Desorption study of a proton from H/Si(100) by electron stimulated desorption spectroscopy 283 (1993) 195

Y.-S. Park, J.-S. Bang and J. Lee, Angular distribution of D_2 desorbing from the monodeuteride phase on a Si(100) surface 283 (1993) 209

K. Yagi, A. Yamanaka and H. Yamaguchi, Surface electromigration of metals on Si surfaces studied by UHV-REM 283 (1993) 300

S. Ino, T. Yamanaka and S. Ito, Epitaxial growth of metals on Si and Ge investigated by RHEED-TRAXS and UHV-SEM 283 (1993) 319

M. Sasaki, J. Yuhara, M. Inoue and K. Morita, Studies on 2D Au–Cu binary adsorbates on Si(111) surfaces by means of combined LEED/AES/RBS techniques 283 (1993) 327

Y. Kimura and K. Takayanagi, Incommensurate phase of Sn/Si(100) studied by HR-REM 283 (1993) 349

T. Kawamura and M.R. Wilby, Transient growth in molecular beam epitaxy of Si on Si(100) vicinal surfaces 283 (1993) 360

Y. Morikawa, K. Kobayashi and K. Terakura, First-principles molecular dynamics study of alkali-metal adsorption on a Si(001) surface 283 (1993) 377

S. Hasegawa and S. Ino, Surface structures and conductance at initial stages in epitaxy of metals on a Si(111) surface 283 (1993) 438

K. Fukutani, M. Tsunoda, Y. Murata, H. Yamashita, K. Komaki and K. Kobayashi, High-resolution depth analysis of hydrogen by a resonance nuclear reaction: a-Si/H/Si(001) 283 (1993) 447

A. Ishii and Y. Murata, Theory of adsorbate-sensitive positronium formation and its application to ion desorption 283 (1993) 462

W. Raunau, H. Niehus and G. Comsa, Epitaxial iron silicides on Si(001): an investigation with scanning tunneling microscopy and spectroscopy 284 (1993) L375

T.M. Grehk, C.U.S. Larsson, N.P. Prince and S.A. Flodström, Adsorption of lithium on the Si(111)7×7 surface studied with high resolution core-level spectroscopy 284 (1993) L384

G.S. Herman, E.L. Bullock, M. Yamada, A.P. Kaduwela, D.J. Friedman, S. Thevuthasan, Y.J. Kim, T.T. Tran, C.S. Fadley, Th. Lindner, D.E. Ricken, A.W. Robinson and A.M. Bradshaw, A scanned-angle and scanned-energy photoelectron diffraction study of $(\sqrt{3} \times \sqrt{3})R30°$ Ag on Si(111) 284 (1993) 23

M. Horn-von Hoegen, M. Pook, A. Al Falou, B.H. Müller and M. Henzler, The interplay of surface morphology and strain relief in surfactant mediated growth of Ge on Si(111) 284 (1993) 53

L. Andersohn and U. Köhler, In situ observation of water adsorption on Si(100) with scanning tunneling microscopy 284 (1993) 77

Silicon (continued)
M.F. Crowley, D. Srivastava and B.J. Garrison, Molecular dynamics investigation of the MBE growth of Si on Si{110} 284 (1993) 91
K. Jacobi and U. Myler, Chemisorption of H, H_2O and C_2H_4 on Si(113): implications for the structure 284 (1993) 223
H. Itoh, S. Narui, H. Tanabe and T. Ichinokawa, Nucleation and surface reconstruction of Pd on Si(100) observed by scanning tunneling microscopy 284 (1993) 236
A.J. Mayne, A.R. Avery, J. Knall, T.S. Jones, G.A.D. Briggs and W.H. Weinberg, An STM study of the chemisorption of C_2H_4 on Si(001)(2×1) 284 (1993) 247
N. Motta, A. Sgarlata, G. Gaggiotti, F. Patella, A. Balzarotti and M. De Crescenzi, Iron disilicide growth on Si(111): a scanning tunneling microscopy investigation 284 (1993) 257
J.C.S. Chu, Y. Bu and M.C. Lin, Spectroscopy and reactions of hydrazoic acid on silicon single crystal surfaces. III. HN_3 and DN_3 on Si(111)(7×7) 284 (1993) 281
N. Ohtani, S.M. Mokler, M.H. Xie, J. Zhang and B.A. Joyce, RHEED investigation of Ge surface segregation during gas source MBE of $Si/Si_{1-x}Ge_x$ heterostructures 284 (1993) 305
P. Xu, D. Dunn, J.P. Zhang and L.D. Marks, Atomic imaging of surfaces in plan view 285 (1993) L479
B.I. Craig, A theoretical examination of the electron localisation within a small hydrogen covered silicon outcrop on Si(001) 285 (1993) L486
J.M. Lopez Sancho, M.C. Refolio, M.P. Lopez Sancho and J. Rubio, Extended Hubbard model analysis of semiconductor–alkali interfaces: implications for the metallization problem 285 (1993) L491
G. Krausch, R. Fink, K. Jacobs, B. Luckscheiter, J. Lohmüller, B.-U. Runge, U. Wöhrmann and G. Schatz, Indium adsorption on silicon surfaces: a PAC study 285 (1993) 81
A. Hamawi and L. Walldén, Quantum size effect for Na films on Si(100) 285 (1993) 93
P. Badziag and W.S. Verwoerd, Quantum chemical modeling of the scanning tunneling microscope 285 (1993) 145
Y. Bu, J.C.S. Chu and M.C. Lin, Thermal stability of trimethyl indium on Si(100)(2×1) as studied with HREELS, UPS and XPS: a comparison with the results from Si(111)(7×7) and Si(110) studies 285 (1993) 243
P. Jakob, Y.J. Chabal, K. Raghavachari, P. Dumas and S.B. Christman, Imperfections on the chemically prepared, ideally H-terminated Si(111)-(1×1) surfaces 285 (1993) 251
T. Halicioglu, Carbon atoms on the (2×1) reconstructed Si(100) surface 285 (1993) 259
M.K. Kelly, S. Zollner and M. Cardona, Modelling the optical response of surfaces measured by spectroscopic ellipsometry: application to Si and Ge 285 (1993) 282
B.I. Craig and P.V. Smith, Erratum to "The structures of small hydrocarbons adsorbed on Si(001) and Si terminated β-SiC(001)" [Surface Science 276 (1992) 174] 285 (1993) 295
J. Wintterlin and Ph. Avouris, Hydrogen effects in CVD: selective etching and metastable phases 286 (1993) L529
A.C. Dillon, M.B. Robinson, S.M. George and D.A. Roberts, Adsorption and decomposition of diethylgermane on porous silicon surfaces 286 (1993) L535
M. Maline, M. Ducarroir, F. Teyssandier, R. Hillel, R. Berjoan, F.J.J. Van Loo and W. Wakelkamp, Auger electron spectroscopy of compounds in the Si–Ti–C system. Characterization of Si–Ti–C multiphased materials obtained by CVD 286 (1993) 82
I. Al-Hayek and Ş. Katircioglu, Water adsorption on the Si(110) surface 286 (1993) 92
W. Raunau, H. Niehus, Th. Schilling and G. Comsa, Scanning tunneling microscopy and spectroscopy of iron silicide epitaxially grown on Si(111) 286 (1993) 203
H. Hirayama, Low energy H_3^+ molecular ion scattering from the Si(100) surface 287/288 (1993) 12
S. Kawamoto, K. Saitoh, M. Hirai, M. Kusaka and M. Iwami, Study of the Pd/Si(100)2×1 system using soft X-rays 287/288 (1993) 151

Silicon (continued)

I. Ochiai, T. Ogawa, Y. Takakuwa and K. Mochiji, Photon-stimulated desorption from chemically treated Si surfaces 287/288 (1993) 175
M.A. Kulakov, St. Werdin, P. Heuell and B. Bullemer, Modelling of pattern growth by vacancy diffusion and trapping on Si(111)7×7 surface 287/288 (1993) 241
V. Eteläniemi, E.G. Michel and G. Materlik, RbBr/Si(111) interface studied by the X-ray standing wave method 287/288 (1993) 288
T. Urano, S. Hongo and T. Kanaji, Structure analysis of an alkali metal adsorbed Si(001)(2×1) surface by tensor LEED 287/288 (1993) 294
A. Ishii and T. Aisaka, Dynamical calculation of an ARUPS spectrum for a Si(100)(2×1) surface 287/288 (1993) 299
N. Safta, J.-P. Lacharme and C.A. Sébenne, Clean Si(110): a surface with intrinsic or extrinsic defects? 287/288 (1993) 312
J. Alvarez, J.J. Hinarejos, E.G. Michel and R. Miranda, Determination of the Fe/Si(111) phase diagram by means of photoelectron spectroscopies 287/288 (1993) 490
K. Watanabe and T. Satoh, Electric field induced surface electronic structures of Si(100) surface 287/288 (1993) 502
K. Ueda and A. Takano, Hydrogen termination study of silicon dangling bonds by electron stimulated desorption spectroscopy (TOF-ESD) 287/288 (1993) 506
P. Viščor and J. Vedde, Electrical impedance spectroscopy of silicon surface states 287/288 (1993) 510
L.S.O. Johansson and B. Reihl, Alkali metals on Si(100)2×1: comparative study of the surface electronic structures for Li, Na and K adsorption 287/288 (1993) 524
E. Landemark, C.J. Karlsson, Y.-C. Chao and R.I.G. Uhrberg, Dimer structure of the Si(001)2×1 and c(4×2) reconstructions derived from core-level and valence-band photoemission results 287/288 (1993) 529
T. Vinchon, A.M. Oles, D. Spanjaard and M.C. Desjonquères, Are the dimers of the Si(001)(2×1) surface antiferromagnetic? 287/288 (1993) 534
S. Hongo, S. Saito, T. Urano and T. Kanaji, Singlet–triplet conversion efficiency of metastable He atoms dependent upon structures of adsorbed alkali metals on Si(100)2×1 287/288 (1993) 588
T.H. Shen and C.C. Matthai, Calculation of the optical properties of As molecules on Si substrates 287/288 (1993) 672
G.G. Malliaras, H.A. Wierenga and Th. Rasing, Study of the step structure of vicinal Si(110) surfaces using optical second harmonic generation 287/288 (1993) 703
J.R. Power and J.F. McGilp, Resonance in the optical second harmonic response from the Si(111)–Sb interface 287/288 (1993) 708
J.D. O'Mahony, J.F. McGilp, M.H.W. Verbruggen and C.F.J. Flipse, Au structures on Si(111) studied by spectroscopic ellipsometry and optical second harmonic generation 287/288 (1993) 713
U. Rossow, U. Frotscher, W. Richter and D.R.T. Zahn, In situ optical characterisation with monolayer sensitivity: the As-terminated Si(111) surface 287/288 (1993) 718
H. Yamaguchi and K. Yagi, Current effects on Si(111) surfaces at the phase transition between the 7×7 and the 1×1 structures 287/288 (1993) 820
J.A. Martin-Gago, J. Díaz, S. Ferrer and F. Comin, STM studies of Si evaporation on Si at RT by laser ablation 287/288 (1993) 911
H. Minoda, Y. Tanishiro, N. Yamamoto and K. Yagi, Growth of Si on Si(111)$\sqrt{3} \times \sqrt{3}$–In surfaces studied by UHV-REM 287/288 (1993) 915
T.I.M. Bootsma and T. Hibma, A strain-relieve transition in epitaxial growth of metals on Si(111)(7×7) 287/288 (1993) 921
M. Wemmenhove and T. Hibma, Structure and coverage of epitaxial Pb-layers on Si(111)(7×7) 287/288 (1993) 925

Silicon (continued)
M. Tsukada, K. Kobayashi, N. Isshiki, H. Kageshima, T. Uchiyama, S. Watanabe and T. Schimizu, Novel features of surface electronic structure revealed by the theoretical simulation of scanning tunneling microscopy/spectroscopy 287/288 (1993) 1004
T. Yasue, T. Koshikawa, H. Tanaka and I. Sumita, Initial stage of Cu growth on Si(111)7×7 surface studied by scanning tunneling microscopy 287/288 (1993) 1025
S. Watanabe, M. Aono and M. Tsukada, Theoretical calculations of STM images of the Si(111)$\sqrt{3} \times \sqrt{3}$–Ag and –Sb surfaces 287/288 (1993) 1036
K. Ninomiya and M. Hasegawa, Lateral resolution of microscopic X-ray photoelectron spectroscopy using a focused soft X-ray beam 287/288 (1993) 1051
H. Uchida, D.H. Huang, J. Yoshinobu and M. Aono, Single-atom manipulation on the Si(111)7×7 surface by the scanning tunneling microscope (STM) 287/288 (1993) 1056
S. Kono, N. Nakamura, K. Anno and S. Teruyama, Study of solid surfaces using micro-electron-beams 287/288 (1993) 1092
T.M. Jung, R. Kaplan and S.M. Prokes, Ga on Si(112): growth and energetics of thermal desorption 289 (1993) L577
I. Vilfan, Unbinding of double steps on vicinal Si(001) surfaces 289 (1993) L604
D.G. Li, N.S. McAlpine and D. Haneman, Precision determination of long-wavelength cleavage luminescence energy and derivation of minimum surface state gap on clean cleaved Si surfaces 289 (1993) L609
A. Vittadini, A. Selloni and M. Casarin, Energetics of atomic hydrogen diffusion on Si(100) 289 (1993) L625
L. Spiess, P.S. Mangat, S.-P. Tang, K.M. Schirm, A.J. Freeman and P. Soukiassian, Combined theoretical and experimental determination of the atomic structure and adsorption site of Na on the Si(100)2×1 surface 289 (1993) L631
G.S. Herman, J.C. Woicik, A.B. Andrews and J.L. Erskine, High-resolution photoelectron spectroscopy study of ($\sqrt{3} \times \sqrt{3}$)R30°-Ag on Si(111) 290 (1993) L643
Ru-Hong Zhou, Pei-Lin Cao and Li-Quan Lee, Cluster models study of Ag bonding, migration and interaction on Si(100)-2×1 290 (1993) L649
B.I. Craig and P.V. Smith, Monolayer chemisorption of HCl and Cl_2 on the Si(001)2×1 surface 290 (1993) L662
K.E. Johnson, P.K. Wu, M. Sander and T. Engel, The mesoscopic and microscopic structural consequences from decomposition and desorption of ultrathin oxide layers on Si(100) studied by scanning tunneling microscopy 290 (1993) 213
A.B. Krasilnikov, A.V. Latyshev and A.L. Aseev, Transformation of a Si(111) stepped surface during the formation of a Si(3×1)Ca superstructure 290 (1993) 232
K. Prabhakaran, Y. Kobayashi and T. Ogino, Chemically prepared oxides on Si(001): an XPS study 290 (1993) 239
R. Souda, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy D^+ scattering from Cs and CsCl adsorbed on the Si(100)2×1 surface 290 (1993) 245
S.L. Bennett, C.L. Greenwood and E.M. Williams, ESDIAD studies of fluorine and chlorine adsorption at Si(100) 290 (1993) 267

Silicon carbide
Kai Wu, Dezheng Wang, Xuming Wei, Yuming Cao and Xiexian Guo, An anomalous adsorption curve: Cl on Ag(111) 285 (1993) L522
B.I. Craig and P.V. Smith, Erratum to "The structures of small hydrocarbons adsorbed on Si(001) and Si terminated β-SiC(001)" [Surface Science 276 (1992) 174] 285 (1993) 295
M. Maline, M. Ducarroir, F. Teyssandier, R. Hillel, R. Berjoan, F.J.J. Van Loo and W. Wakelkamp, Auger electron spectroscopy of compounds in the Si–Ti–C system. Characterization of Si–Ti–C multiphased materials obtained by CVD 286 (1993) 82

Silicon dioxide
X. Xu and D.W. Goodman, The preparation and characterization of ultra-thin silicon dioxide films on a Mo(110) surface 282 (1993) 323

Silicon oxide
J.B. Zhou, T. Gustafsson, R.F. Lin and E. Garfunkel, Medium energy ion scattering study of Ni on ultrathin films of SiO_2 on Si(111) 284 (1993) 67
X. Xu, J.-W. He and D.W. Goodman, A surface spectroscopic study of metal–support interactions: model studies of copper on thin SiO_2 films 284 (1993) 103
C. Noguera, J. Goniakowski and S. Bouette-Russo, Electronic structure of clean and hydroxylated oxide surfaces 287/288 (1993) 188

Silver
V.Yu. Aristov, M. Bertolo, P. Althainz and K. Jacobi, The Ag/n-InSb(110) interface at 10 K: first observation of an anomalous Fermi-level pinning 281 (1993) 74
B.N.J. Persson, Polarizability of small spherical metal particles: influence of the matrix environment 281 (1993) 153
K. Fukutani, Promotion of epitaxial growth of Ge by Ag and Pb deposited on a clean Ge(111) surface 281 (1993) 285
T. Takahashi and S. Nakatani, Refinement of the Si(111)$\sqrt{3} \times \sqrt{3}$–Ag structure by surface X-ray diffraction 282 (1993) 17
P.J. Feibelman, Perturbation of surface plasmon dispersion by "extra" electrons near a surface 282 (1993) 129
W.J. Wytenburg, R.M. Ormerod and R.M. Lambert, Growth and stability of ultra-thin aluminium films on Ag(110) and Ag(111) 282 (1993) 205
U. van Slooten, E.J.J. Kirchner and A.W. Kleyn, Classical trajectory study of fast H_2 scattering from Ag(111) 283 (1993) 27
U. Albrecht, A. Otto and P. Leiderer, Diffusive two-dimensional spreading of a polymer 283 (1993) 383
S. Hasegawa and S. Ino, Surface structures and conductance at initial stages in epitaxy of metals on a Si(111) surface 283 (1993) 438
T. Munakata and T. Kasuya, Laser based photoelectron spectromicroscope 283 (1993) 452
H.B. Nielsen and W. Thowladda, Position and linewidth of the K-induced 4s resonance on Ag(100): a two-photon photo-emission study 284 (1993) L426
X. Bao, J.V. Barth, G. Lehmpfuhl, R. Schuster, Y. Uchida, R. Schlögl and G. Ertl, Oxygen-induced restructuring of Ag(111) 284 (1993) 14
G.S. Herman, E.L. Bullock, M. Yamada, A.P. Kaduwela, D.J. Friedman, S. Thevuthasan, Y.J. Kim, T.T. Tran, C.S. Fadley, Th. Lindner, D.E. Ricken, A.W. Robinson and A.M. Bradshaw, A scanned-angle and scanned-energy photoelectron diffraction study of $(\sqrt{3} \times \sqrt{3})$R30° Ag on Si(111) 284 (1993) 23
A. Ludviksson, C. Huang, H.J. Jänsch and R.M. Martin, Isotopic studies of the reaction of NO on silver surfaces 284 (1993) 328
P. Aebi, M. Erbudak, A.P. Hitchcock, M. Szymonski, T. Tyliszczak and E. Wetli, Imaging of surfaces by means of secondary electrons 285 (1993) 275
G. Lee, P.T. Sprunger and E.W. Plummer, Surface plasmon dispersion and damping on Ag(110) 286 (1993) L547
Y.B. Zhao, J.E. Whitten and R. Gomer, Electron stimulated desorption of hydrogen from W(110) 286 (1993) 290
J. Zhang, B. Heinrich and K. Colbow, Surface observations of fractal patterns on SnO_2 films 286 (1993) 327
K.M. Neyman and N. Rösch, Negatively charged μ_3-ON species on Ag(111): a LCGTO-LDF cluster analysis of HREELS data 287/288 (1993) 64

Silver (continued)
M. Höfer, H. Stolz and H.-W. Wassmuth, Coadsorption of SO_2 and Cs on Ag(100) 287/288 (1993) 130
M. Canepa, P. Cantini, L. Mattera, M. Salvietti, S. Terreni and F. Valdenazzi, Water dissociation on O($n\times1$)–Ag(110) phases 287/288 (1993) 273
G. Dorenbos and D.O. Boerma, The structure of the Ag(110)-c(6×2)O surface determined with LEIS 287/288 (1993) 443
C. Mottet, G. Tréglia and B. Legrand, Topology of a Ag monolayer on a Cu(111) substrate: a tight-binding quenched molecular dynamics study 287/288 (1993) 476
M. Seelmann-Eggebert, G.P. Carey, R. Klauser and H.J. Richter, A case study for XPD in the presence of a compositional depth profile: interface formation between metals (Ag, Al) and HgCdTe 287/288 (1993) 495
G. Le Lay, R.L. Johnson, R. Seemann, F. Grey, R. Feidenhans'l and M. Nielsen, Electronic and crystallographic structures of 2D silver adlayers on Ge(111) 287/288 (1993) 539
H. Stolz, M. Höfer and H.-W. Wassmuth, TPD, AES, $\Delta\phi$ and LEED investigations of cesium adsorbed on Ag(100) 287/288 (1993) 564
M. Rocca and U. Valbusa, Electronic excitations on silver single crystal surfaces 287/288 (1993) 770
G.G. Kleiman, R. Landers, P.A.P. Nascente and S.G.C. de Castro, $L_3M_{4,5}M_{4,5}$ Auger transitions and screening mechanisms in the 4d metals 287/288 (1993) 798
R. Landers, P.A.P. Nascente, S.G.C. de Castro and G.G. Kleiman, Bremsstrahlung-excited LMN and LMM Auger spectra of Nb, Mo, Pd, and Ag 287/288 (1993) 802
G. Bracco, C. Malò, C.J. Moses and R. Tatarek, On the primary mechanism of surface roughening: the Ag(110) case 287/288 (1993) 871
A. Bot, U. van Slooten, W.R. Koppers and A.W. Kleyn, Surface diffusion during thin film annealing studied by XPS 287/288 (1993) 901
D. Rouyer, C. Krembel, M.C. Hanf, D. Bolmont and G. Gewinner, X-ray photoelectron diffraction from ultra-thin Cr layers on Au(100) and Ag(100): a comparison 287/288 (1993) 935
S. Rousset, S. Chiang, D.E. Fowler and D.D. Chambliss, Epitaxial growth of Au on Ag(110) studied by scanning tunneling microscopy 287/288 (1993) 941
M. Schick, J. Schäfer, K. Kalki, G. Ceballos, P. Reinhardt, H. Hoffschulz and K. Wandelt, Miscibility within monolayer Ag–Cu films on Ru(0001) 287/288 (1993) 960
Ch. Ammer, Stacking faults in epitaxy investigated by SPALEED 287/288 (1993) 964
S. Nakanishi, K. Kawamoto and K. Umezawa, The initial stages of deposition of Au and Ag on Cu(001) studied by low-energy ion scattering 287/288 (1993) 974
K. Marre and H. Neddermeyer, Growth of ordered thin films of NiO on Ag(100) and Au(111) 287/288 (1993) 995
M. Tsukada, K. Kobayashi, N. Isshiki, H. Kageshima, T. Uchiyama, S. Watanabe and T. Schimizu, Novel features of surface electronic structure revealed by the theoretical simulation of scanning tunneling microscopy/spectroscopy 287/288 (1993) 1004
S. Watanabe, M. Aono and M. Tsukada, Theoretical calculations of STM images of the Si(111)$\sqrt{3}\times\sqrt{3}$–Ag and –Sb surfaces 287/288 (1993) 1036
R.D. Ramsier and J.T. Yates, Jr., Thermal and electron-induced behavior of d_6-benzene-chromium-tricarbonyl adsorbed on Ag(111) 289 (1993) 39
R.M. Charatan and R.S. Williams, Influence of triple scattering on impact collision ion scattering spectroscopy at 135° 289 (1993) 163
A. Gross and W. Brenig, Vibrational excitation of NO in NO/Ag scattering revisited 289 (1993) 335
G.S. Herman, J.C. Woicik, A.B. Andrews and J.L. Erskine, High-resolution photoelectron spectroscopy study of ($\sqrt{3}\times\sqrt{3}$)R30°-Ag on Si(111) 290 (1993) L643
Ru-Hong Zhou, Pei-Lin Cao and Li-Quan Lee, Cluster models study of Ag bonding, migration and interaction on Si(100)-2×1 290 (1993) L649
R.N. Carter, A.B. Anton and G. Apai, Reactions of π-allyl with atomic oxygen and hydroxyl on Ag(110) 290 (1993) 319

Sodium, see Alkali metals

Sodium oxide, see Oxides

Solid–electrolyte interface
B.J. Cruickshank, D.D. Sneddon and A.A. Gewirth, In situ observations of oxygen adsorption on a Cu(100) substrate using atomic force microscopy 281 (1993) L308
J.M. Doña and J. González-Velasco, Erratum to "The dependence of the surface diffusion coefficients of gold atoms on the potential: its influence on reconstruction of metal lattices" [Surface Science 274 (1992) 205] 282 (1993) 202
Y. Serruys, T. Sakout and D. Gorse, Anodic oxidation of titanium in 1M H_2SO_4, studied by Rutherford backscattering 282 (1993) 279
E. Leiva, W. Schmickler and M. Urbakh, Second harmonic generation and the microscopic structure of the metal–electrolyte interface 287/288 (1993) 681
O.M. Magnussen, J. Wiechers and R.J. Behm, In situ scanning tunneling microscopy observations of the potential-dependent (1×2) reconstruction on Au(110) in acidic electrolytes 289 (1993) 139
J.M. Feliu, R. Gómez, M.J. Llorca and A. Aldaz, Electrochemical behavior of irreversibly adsorbed selenium dosed from solution on Pt(*h, k, l*) single crystal electrodes in sulphuric and perchloric acid media 289 (1993) 152
K.L. Sebastian and G. Doyen, Electrochemical scanning tunneling microscopy: does the orientational polarization of the liquid play any role? 290 (1993) L703
M. Taniguchi, E.K. Kuzembaev and K. Tanaka, A mimic model of Pt–Rh catalyst prepared by electrochemical deposition of Rh on the Pt(100) surface 290 (1993) L711
D.W. Suggs and J.L. Stickney, Studies of the structures formed by the alternated electrodeposition of atomic layers of Cd and Te on the low-index planes of Au. I. LEED and Auger studies 290 (1993) 362
D.W. Suggs and J.L. Stickney, Studies of the surface structures formed by the alternated electrodeposition of Cd and Te on the low-index planes of Au. II. STM studies 290 (1993) 375

Sputtering
K.G. Nakamura and M. Kitajima, Time-resolved Raman measurements of a graphite surface under ion irradiation 283 (1993) 255
M. Okada and Y. Murata, Sputtering of Al surface with very-low-energy ions 287/288 (1993) 21
P. Weigand, W. Hofer and P. Varga, Investigation of $Pt_{25}Ni_{75}(111)$: preferential sputtering and surface segregation 287/288 (1993) 350
L. Soriano, M. Abbate, J. Vogel, J.C. Fuggle, A. Fernández, A.R. González-Elipe, M. Sacchi and J.M. Sanz, Chemical changes induced by sputtering in TiO_2 and some selected titanates as observed by X-ray absorption spectroscopy 290 (1993) 427

Strontium
T.I.M. Bootsma and T. Hibma, A strain-relieve transition in epitaxial growth of metals on Si(111)(7×7) 287/288 (1993) 921

Sulphides
S. Masuda and Y. Harada, Deexcitation of rare-gas metastable atoms on semiconductor surfaces: MoS_2 and $LaCoO_3$ 283 (1993) 78
Y. Kadowaki, K. Aika, H. Kondoh and H. Nozoye, Surface structure of $MoS_2(001)$ determined by coaxial impact-collision ion scattering spectroscopy (CACISS) 287/288 (1993) 396
M. Remškar, A. Prodan and V. Marinković, Charge-density wave modulation in surface layers of TaS_2 and NbS_2 287/288 (1993) 409

Sulphides (continued)
A.R.H.F. Ettema, C. Haas, P. Moriarty and G. Hughes, Wave function imaging of the PbS(001) surface with scanning tunneling microscopy 287/288 (1993) 1106
A. Schumacher, L. Scandella, N. Kruse and R. Prins, Single-layer MoS_2 on mica: studies by means of scanning force microscopy 289 (1993) L595

Sulphur
W. Liu, J.R. Lou and K.A.R. Mitchell, LEED crystallographic studies for the Rh(100)-p(2×2)-S and Rh(100)-c(2×2)-S surface structures 281 (1993) 21
M.M. Montagono and J. Cabané, Thermodynamics of sulphur adsorption on iron 285 (1993) L468
D.R. Mullins and P.F. Lyman, Sulfur-induced changes in the W(001) surface core level shift 285 (1993) L473
K. Newstead, A.W. Robinson, S. d'Addato, A. Patchett, N.P. Prince, R. McGrath, R. Whittle, E. Dudzik and I.T. McGovern, An X-ray absorption fine structure study of Ge(001)(2×1)–S 287/288 (1993) 317
S. Takagi and T. Gotoh, Observation of a titanium surface by desorbed ion images with a scanning electron microscope 287/288 (1993) 361
M. Sokolowski and H. Pfnür, Critical behaviour of the p(2×2) and $(\sqrt{3} \times \sqrt{3})$R30° order–disorder phase transitions of S/Ru(001) 287/288 (1993) 831
Han Xu, P. Uvdal, C.M. Friend and J. Stöhr, The adsorption structure of 2, 5-dihydrothiophene on Mo(110)-(4×1)-S: ring orientation as determined by NEXAFS 289 (1993) L599
J. Prasad, E. Murray and J.A. Kelber, Site selective chemistry of S, Cl and H_2O at the iron oxide surface 289 (1993) 10
Y. Huang and J.M. Cowley, Structure of the sulfur-adsorbed $Cu_3Au(110)$ surface 289 (1993) 340

Sulphur dioxide
J. Ahner and H.-W. Wassmuth, Molecular and dissociative chemisorption and condensation of SO_2 on Cu(111) 287/288 (1993) 125
M. Höfer, H. Stolz and H.-W. Wassmuth, Coadsorption of SO_2 and Cs on Ag(100) 287/288 (1993) 130
C.L. Greenwood, E.M. Williams, G. Thornton, S.L. Bennett, E. Román, J.L. de Segovia and M.C. Torquemada, An ESD and ESDIAD investigation of $TiO_2(110)$–SO_2 287/288 (1993) 386

Superconductivity
S. Lapinskas, A. Rosengren and E.E. Tornau, Monte Carlo study of oxygen thermal desorption from $YBa_2Cu_3O_{6+x}$ compound 287/288 (1993) 50
O. Navarro and C. Wang, Electronic correlation in two-dimensional systems 287/288 (1993) 622
I.L. Bolotin, V.A. Grazhulis, A.M. Ionov, S.G. Karabashev and D.A. Shuliatev, Electron spectroscopy for (001)$Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4}$ ($n = 1, 2$); comparative studies 287/288 (1993) 630
H. Guyot, Study of the electronic structure of Ba(Pb, Bi)$O_{3-\delta}$ single crystals 287/288 (1993) 633
M.N. Mikheeva, V.G. Nazin, A.V. Svishchev, D.S.-L. Law, T.S. Turner, P. Bailey, D. Teehan, S.N. Barilo and P.V. Gritskov, Low temperature photoemission study of La_2CuO_{4+x} single crystals 287/288 (1993) 662
K. Ikeda, K. Takamuku, R. Itti and N. Koshizuka, Atomic resolution STM observation of the Bi–O surface of yttrium substituted $Bi_2Sr_2CaCu_2O_y$ single crystals 290 (1993) 207

Superlattices
M. Shinn, P.B. Mirkarimi and S.A. Barnett, Nucleation of lattice-mismatched transition-metal nitride films: limitations on superlattice growth 281 (1993) 1

Superlattices (continued)
M. Sekoguchi, Y. Uehara and S. Ushioda, Combined Raman/HREELS study of ZnSe–ZnS strained-layer superlattices 283 (1993) 355

Surface conductivity
U. Albrecht, P. Leiderer and K. Kono, Surface state electrons on quench-condensed hydrogen films as a surface probe 283 (1993) 423
S. Hasegawa and S. Ino, Surface structures and conductance at initial stages in epitaxy of metals on a Si(111) surface 283 (1993) 438

Surface defects
P. Molinàs-Mata and J. Zegenhagen, Defects of Ge(111)-c(2×8) – structural and electronic characterization 281 (1993) 10
S. Balibar, C. Guthmann and E. Rolley, Step degeneracy and step–step interactions 283 (1993) 290
M. Uwaha and Y. Saito, Roughening and smoothing of steps with surface diffusion 283 (1993) 366
M. Horn-von Hoegen, M. Pook, A. Al Falou, B.H. Müller and M. Henzler, The interplay of surface morphology and strain relief in surfactant mediated growth of Ge on Si(111) 284 (1993) 53
M. Gajdardziska-Josifovska, P.A. Crozier, M.R. McCartney and J.M. Cowley, Ca segregation and step modifications on cleaved and annealed MgO(100) surfaces 284 (1993) 186
J.M. Rickman and D.J. Srolovitz, Defect interactions on solid surfaces 284 (1993) 211
M.A. Kulakov, St. Werdin, P. Heuell and B. Bullemer, Modelling of pattern growth by vacancy diffusion and trapping on Si(111)7×7 surface 287/288 (1993) 241
G.G. Malliaras, H.A. Wierenga and Th. Rasing, Study of the step structure of vicinal Si(110) surfaces using optical second harmonic generation 287/288 (1993) 703
Ph. Ebert and K. Urban, Step smoothing and surface vacancy reactions on InP(110) and GaP(110) observed by scanning tunneling microscopy 287/288 (1993) 891
I. Vilfan, Unbinding of double steps on vicinal Si(001) surfaces 289 (1993) L604

Surface diffusion
W. Selke and T. Bieker, Morphological changes of periodic surface profiles 281 (1993) 163
R. Ferrando and E. Scalas, Self-diffusion in a 2D lattice gas with lateral interactions 281 (1993) 178
J.M. Doña and J. González-Velasco, Erratum to "The dependence of the surface diffusion coefficients of gold atoms on the potential: its influence on reconstruction of metal lattices" [Surface Science 274 (1992) 205] 282 (1993) 202
H.H. Rotermund, Investigation of dynamic processes in adsorbed layers by photoemission electron microscopy (PEEM) 283 (1993) 87
K. Yagi, A. Yamanaka and H. Yamaguchi, Surface electromigration of metals on Si surfaces studied by UHV-REM 283 (1993) 300
M. Maruyama, M. Bienfait, F.C. Liu, O.E. Vilches and F. Rieutord, Quasi-liquid molecular layer at solid hydrogen surfaces 283 (1993) 333
K.A. Fichthorn and W.H. Weinberg, An analysis of adsorbate mobility from the kinetics of two-dimensional domain growth: precursor-mediated surface diffusion 286 (1993) 139
R. Ferrando, R. Spadacini and G.E. Tommei, The diffusion coefficient beyond TST and jump theory 287/288 (1993) 886
A. Bot, U. van Slooten, W.R. Koppers and A.W. Kleyn, Surface diffusion during thin film annealing studied by XPS 287/288 (1993) 901
R. Ferrando and E. Scalas, Incoherent scattering width in 2D systems with lateral interactions 287/288 (1993) 907
L.B. Hansen, P. Stoltze, K.W. Jacobsen and J.K. Nørskov, Activation free energy and entropy for the normal and exchange selfdiffusion processes on Cu(100) 289 (1993) 68

Surface diffusion (continued)
A. Vittadini, A. Selloni and M. Casarin, Energetics of atomic hydrogen diffusion on Si(100) 289 (1993) L625
C. Massobrio, Comment on 'Structure and diffusion on clusters on Ni surfaces by C.-L. Liu and J.B. Adams' 289 (1993) L638
C.-L. Liu and J.B. Adams, Reply to "Comment on 'Structure and diffusion of clusters on Ni surfaces' by C. Massobrio" 289 (1993) L641
M. Croci, C. Félix, G. Vandoni, W. Harbich and R. Monot, Measurement of macroscopic diffusion of CO on Pt(111) by thermal helium scattering 290 (1993) L667
Y. Song and R. Gomer, Diffusion of oxygen on the Mo(110) plane 290 (1993) 1

Surface energy
B.D. Todd and R.M. Lynden-Bell, Surface and bulk properties of metals modelled with Sutton–Chen potentials 281 (1993) 191

Surface melting
B.D. Todd and R.M. Lynden-Bell, Surface and bulk properties of metals modelled with Sutton–Chen potentials 281 (1993) 191
Y. Teraoka, A theoretical study of melting 281 (1993) 317
J.W.M. Frenken, H.M. van Pinxteren and L. Kuipers, New views on surface melting obtained with STM and ion scattering 283 (1993) 283
A. Pavlovska, D. Dobrev and E. Bauer, Surface melting versus surface non-melting: an equilibrium shape study 286 (1993) 176
A. Boutin, B. Rousseau and A.H. Fuchs, Surface melting of a molecular crystal by computer simulations 287/288 (1993) 866

Surface morphology
E.A. Eklund, E.J. Snyder and R.S. Williams, Correlation from randomness: quantitative analysis of ion-etched graphite surfaces using the scanning tunneling microscope 285 (1993) 157
V. Bressler-Hill, R. Maboudian, M. Wassermeier, X.-S. Wang, K. Pond, P.M. Petroff and W.H. Weinberg, Surface morphology of MBE-grown GaAs(001)-(2×4) and GaAs(001)-faceted surfaces investigated by scanning tunneling microscopy 287/288 (1993) 514
M. Gajdardziska-Josifovska, M.R. McCartney and D.J. Smith, Reflection electron microscopy studies of GaP(110) surfaces in UHV-TEM 287/288 (1993) 1062
A.B. Krasilnikov, A.V. Latyshev and A.L. Aseev, Transformation of a Si(111) stepped surface during the formation of a Si(3×1)Ca superstructure 290 (1993) 232

Surface phonons and adsorbate vibrations
C. Girardet and P.N.M. Hoang, Dynamics of a frustrated rare gas monolayer adsorbed on a corrugated substrate: resonance and hybridization of the dispersion curves of Ar on MgO(100) 282 (1993) 288
H. Kasai and A. Okiji, Molecular vibration dynamics in molecule–surface interactions: subpicosecond transient infrared spectroscopy 283 (1993) 233
S. Nakada, Y. Narahara and K. Kono, Interaction between third sound and surface irregularities 283 (1993) 414
A. Okiji and H. Kasai, Electronic damping of molecular vibrations at metal surfaces: sub-picosecond transient pump–probe spectroscopy 287/288 (1993) 155
T. Nagao, T. Kitamura, T. Iizuka, M. Umeuchi, C. Oshima and S. Otani, Deformation of octahedra at LaB_6(100) surface studied by HREELS 287/288 (1993) 391
E. Hulpke and J. Lüdecke, The giant surface phonon anomaly on hydrogen saturated W(110) and Mo(110) 287/288 (1993) 837

Surface phonons and adsorbate vibrations (continued)
D.D. Koleske and S.J. Sibener, Molecular dynamics simulations of the basal planes of Ni and Cu using Finnis–Sinclair potentials 290 (1993) 179
T. Nagao, K. Kitamura, Y. Iizuka, C. Oshima and S. Otani, Surface phonons of $LaB_6(100)$: deformation of boron octahedra at the surface 290 (1993) 436

Surface plasmons
P.J. Feibelman, Perturbation of surface plasmon dispersion by "extra" electrons near a surface 282 (1993) 129
U. Albrecht, P. Evers and P. Leiderer, Annealing behavior of quench-condensed hydrogen and deuterium films 283 (1993) 419
E. Anno and T. Yamaguchi, Optical absorption of Ni and Pd particles: enhanced correlation interaction between conduction electrons 286 (1993) 168
K. Nakayama and S. Usami, LEED and EELS studies on vanadium (110) and (111) single crystal surfaces 287/288 (1993) 355
M. Rocca and U. Valbusa, Electronic excitations on silver single crystal surfaces 287/288 (1993) 770

Surface roughness
R. Vanselow and X.Q.D. Li, Roughening transitions in the vicinal areas of Ta{110} and Ta{100} observed during vapour growth on clean, thermally rounded Ta crystallites 281 (1993) L326
J.M. Doña and J. González-Velasco, Erratum to "The dependence of the surface diffusion coefficients of gold atoms on the potential: its influence on reconstruction of metal lattices" [Surface Science 274 (1992) 205] 282 (1993) 202
M. Uwaha and Y. Saito, Roughening and smoothing of steps with surface diffusion 283 (1993) 366
T. Munakata and T. Kasuya, Laser based photoelectron spectromicroscope 283 (1993) 452
Wei Li and G. Vidali, Metal adatom induced corrugation of Cu(001) 287/288 (1993) 336

Surface segregation
J.M. Bugnard, R. Baudoing-Savois, Y. Gauthier and E.K. Hill, The (110) surface of the disordered $Pt_{25}Co_{75}$ alloy: a sandwich of almost pure monoatomic layers 281 (1993) 62
J.C. Bertolini, J.L. Rousset, P. Miegge, J. Massardier, B. Tardy, Y. Samson, B.C. Khanra and C. Creemers, Surface segregation study of a dilute Pd_1Fe_{99} alloy by LEIS and XPS 281 (1993) 102
N. Ohtani, S.M. Mokler, M.H. Xie, J. Zhang and B.A. Joyce, RHEED investigation of Ge surface segregation during gas source MBE of $Si/Si_{1-x}Ge_x$ heterostructures 284 (1993) 305
M.M. Montagono and J. Cabané, Thermodynamics of sulphur adsorption on iron 285 (1993) L468
R. Najafabadi and D.J. Srolovitz, Order–disorder transitions at and segregation to (001) Ni–Pt surfaces 286 (1993) 104
J.C. Bertolini, J.L. Rousset, P. Miegge, J. Massardier and B. Tardy, On the large Pd surface segregation and reactivity of Pd_1Fe_{99} and Pd_5Fe_{95} dilute alloys 287/288 (1993) 346
P. Weigand, W. Hofer and P. Varga, Investigation of $Pt_{25}Ni_{75}(111)$: preferential sputtering and surface segregation 287/288 (1993) 350
H. Stadler, W. Hofer, M. Schmid and P. Varga, Embedded-atom method calculations applied to surface segregation of Pt–Ni single crystals 287/288 (1993) 366
A. Senhaji, G. Tréglia, J. Eugène, A. Khoutami and B. Legrand, Alloy surfaces and surface alloys: from equilibrium to kinetics 287/288 (1993) 371
M. Said, M.C. Desjonquères and D. Spanjaard, Core level shifts at bcc transition metal surfaces deduced from the calculation of surface segregation energies 287/288 (1993) 780
A. Khoutami, B. Legrand and G. Tréglia, On a surprising anisotropy of surface segregation in CuPt alloys 287/288 (1993) 851
J. du Plessis, Sequential surface segregation kinetics of the ternary system Fe–Si–S 287/288 (1993) 857

Surface segregation (continued)
J.M. Montejano-Carrizales and J.L. Morán-López, Oxygen chemisorption effects on the spatial atomic distribution of CuNi, CuPd and NiPt nanostructures 287/288 (1993) 1070
G. Bozzolo, B. Good and J. Ferrante, Heat of segregation of single substitutional impurities 289 (1993) 169
I.G. Batirev, A.N. Karavanov and J.A. Leiro, Surface segregation and catalytic properties of Pd–Ru alloys 289 (1993) 357
F.J. Esposto, C.-S. Zhang, P.R. Norton and R.S. Timsit, Segregation studies of an Al–Li alloy 290 (1993) 93
C.-S. Zhang, F.J. Esposto, B.J. Flinn, P.R. Norton and R.S. Timsit, The influence of Li surface segregation on the initial oxidation of an Al–Li alloy at room temperature 290 (1993) 103
L. Yang, T.J. Raeker and A.E. DePristo, Surface segregation in bimetallic clusters: predictions using a molecular dynamics/Monte Carlo corrected effective medium theory 290 (1993) 195
Y. Liu and P. Wynblatt, Study of a surface critical phenomenon associated with surface segregation in Cu–Ag alloys 290 (1993) 335
Cs. Cserháti, H. Bakker and D.L. Beke, Kinetics of surface segregation in alloys 290 (1993) 345

Surface states and interface states
S. Itoh and T. Fujiwara, Surface electronic structures of refractory-metal disilicides 282 (1993) 122
M. Heinrichsmeier, A. Fleszar and A.G. Eguiluz, LDA calculation of the surface states on the (001), (110), and (111) surfaces of aluminum 285 (1993) 129
G. Lee, P.T. Sprunger and E.W. Plummer, Surface plasmon dispersion and damping on Ag(110) 286 (1993) L547
R. Matzdorf, G. Meister and A. Goldmann, Temperature-dependent photoemission spectra from Cu(100) and Cu(111) surfaces 286 (1993) 56
T. Munakata, K. Mase and I. Kinoshita, Two-photon photoemission from NO adsorbed on Cu(111) 286 (1993) 73
H. Tochihara and S. Mizuno, Geometries of Li induced structures on Cu(001): LEED and ARUPS studies 287/288 (1993) 423
K. Watanabe and T. Satoh, Electric field induced surface electronic structures of Si(100) surface 287/288 (1993) 502
P. Viščor and J. Vedde, Electrical impedance spectroscopy of silicon surface states 287/288 (1993) 510
S. Löbus, M. Lau, R. Courths and S. Halilov, The Tamm surface state on ordered $Cu_3Au(001)$ 287/288 (1993) 568
A. Dittmar-Wituski and P.J. Møller, Surface spectroscopy from ultrathin α-Sn films on CdTe(110) 287/288 (1993) 577
M. Donath, Recent developments in surface and thin film magnetism probed by spin-polarized electrons 287/288 (1993) 722
P.G. Strupp, P.C. Stair and E. Weitz, Three-photon photoemission from Cu(100): observation of an unoccupied surface state near $\bar{\Gamma}$ 290 (1993) L699

Surface stress
B.D. Todd and R.M. Lynden-Bell, Surface and bulk properties of metals modelled with Sutton–Chen potentials 281 (1993) 191
J.W. Erickson, W.M. Theis, T. Cole, A.K. Green and V. Rehn, Erratum to "A photoemission study of coherently strained $In_xGa_{1-x}/InP(100)$" [Surface Science 274 (1992) 363] 281 (1993) 220

Surface structure, see also Low energy electron diffraction
B.J. Cruickshank, D.D. Sneddon and A.A. Gewirth, In situ observations of oxygen adsorption on a Cu(100) substrate using atomic force microscopy 281 (1993) L308
A.F. Bellman, D. Cvetko, A. Morgante, M. Polli, F. Tommasini, K.C. Prince and R. Rosei, The (2×2) p2mg to (1×2) O/Rh(110) phase transition 281 (1993) L321
W. Liu, J.R. Lou and K.A.R. Mitchell, LEED crystallographic studies for the Rh(100)-p(2×2)-S and Rh(100)-c(2×2)-S surface structures 281 (1993) 21
C.J. Barnes, A. Wander and D.A. King, A tensor LEED structural study of the coverage-dependent bonding of iodine adsorbed on Rh{111} 281 (1993) 33
A. Wander, C.J. Barnes, L.D. Mapledoram and D.A. King, Structural transitions in ultra-thin nickel films on Rh{111} 281 (1993) 42
T.T. Tran, S. Thevuthasan, Y.J. Kim, D.J. Friedman, A.P. Kaduwela, G.S. Herman and C.S. Fadley, Photoelectron diffraction and photoelectron holography study of a Ge(111) high-temperature surface phase transition 281 (1993) 270
T. Takahashi and S. Nakatani, Refinement of the Si(111)$\sqrt{3} \times \sqrt{3}$–Ag structure by surface X-ray diffraction 282 (1993) 17
H. Li and S.Y. Tong, Imaging atoms in surface dimers of GaAs(001)-c(2×8)/(2×4) by electron-emission holography 282 (1993) 380
J.C. Le Bossé, G. Hansali, J. Lopez, G. Wiatrowski and I. Zasada, Site occupancy pair correlation functions and structure factors of partially ordered overlayers. II. Application to O/Ni(100) 282 (1993) 389
D.L. Abernathy, D. Gibbs, G. Grübel, K.G. Huang, S.G.J. Mochrie, A.R. Sandy and D.M. Zehner, Reconstruction of the (111) and (001) surfaces of Au and Pt: thermal behavior 283 (1993) 260
Y. Aiura, H. Yanashima, H. Fukutani, H. Kato, Y. Sakisaka, T. Maruyama and K. Edamoto, Hydrogen-induced reconstruction of a W(110) surface studied by angle-resolved photoemission spectroscopy 283 (1993) 344
K. Fang, H.-N. Yang and G.-C. Wang, Modification of surface structures and roughening phase transition in Pb(110) by impurities 284 (1993) L399
N. Wang, Y. Uchida and G. Lehmpfuhl, REM study of Au(100) reconstructed surfaces 284 (1993) L419
X. Bao, J.V. Barth, G. Lehmpfuhl, R. Schuster, Y. Uchida, R. Schlögl and G. Ertl, Oxygen-induced restructuring of Ag(111) 284 (1993) 14
V. Maurice, H. Talah and P. Marcus, Ex situ STM imaging with atomic resolution of Ni(111) electrodes passivated in sulfuric acid 284 (1993) L431
G. Tarrach, D. Bürgler, T. Schaub, R. Wiesendanger and H.-J. Güntherodt, Atomic surface structure of Fe_3O_4(001) in different preparation stages studied by scanning tunneling microscopy 285 (1993) 1
Y. Huang and J.M. Cowley, A study of the Cu_3Au(110) surface structure by RHEED 285 (1993) 42
K. Osuch and W.S. Verwoerd, Surface reconstruction of cubic boron nitride (001) 285 (1993) 59
P.S. Mangat, S.T. Kim, K.M. Choudhary, Z. Hurych and P. Soukiassian, Polarization-dependent photoemission EXAFS investigation of the InP(110) surface structure 285 (1993) 102
Y. Liang and D.A. Bonnell, Atomic structures of reduced $SrTiO_3$(001) surfaces 285 (1993) L510
I. Manassidis, A. De Vita and M.J. Gillan, Structure of the (0001) surface of α-Al_2O_3 from first principles calculations 285 (1993) L517
P. Badziag and W.S. Verwoerd, Quantum chemical modeling of the scanning tunneling microscope 285 (1993) 145
B.I. Craig and P.V. Smith, Erratum to "The structures of small hydrocarbons adsorbed on Si(001) and Si terminated β-SiC(001)" [Surface Science 276 (1992) 174] 285 (1993) 295
P. Hu, A. Wander, L. Morales de la Garza, M.P. Bessent and D.A. King, An adsorbate-stabilised vacancy structure for Cu on W{100}: a surface alloy 286 (1993) L542

Surface structure (continued)

D.R. Eisner and T.L. Einstein, Simple formula for Miller indices of periodically kinked and stepped fcc surfaces 286 (1993) L559

U. Starke, A. Barbieri, N. Materer, M.A. Van Hove and G.A. Somorjai, Ethylidyne on Pt(111): determination of adsorption site, substrate relaxation and coverage by automated tensor LEED 286 (1993) 1

Th. Rodach, K.-P. Bohnen and K.M. Ho, First principles calculations of lattice relaxation at low index surfaces of Cu 286 (1993) 66

W. Raunau, H. Niehus, Th. Schilling and G. Comsa, Scanning tunneling microscopy and spectroscopy of iron silicide epitaxially grown on Si(111) 286 (1993) 203

J. Zhang, B. Heinrich and K. Colbow, Surface observations of fractal patterns on SnO_2 films 286 (1993) 327

V. Eteläniemi, E.G. Michel and G. Materlik, RbBr/Si(111) interface studied by the X-ray standing wave method 287/288 (1993) 288

T. Urano, S. Hongo and T. Kanaji, Structure analysis of an alkali metal adsorbed Si(001)(2×1) surface by tensor LEED 287/288 (1993) 294

N. Takeuchi, A. Selloni and E. Tosatti, First principles calculations of the cleaved and annealed Ge(111) surfaces 287/288 (1993) 303

N. Safta, J.-P. Lacharme and C.A. Sébenne, Clean Si(110): a surface with intrinsic or extrinsic defects? 287/288 (1993) 312

K. Newstead, A.W. Robinson, S. d'Addato, A. Patchett, N.P. Prince, R. McGrath, R. Whittle, E. Dudzik and I.T. McGovern, An X-ray absorption fine structure study of Ge(001)(2×1)–S 287/288 (1993) 317

A.R. Sandy, S.G.J. Mochrie, D.M. Zehner, G. Grübel, K.G. Huang and D. Gibbs, Au(111) and Pt(111) surface phase behavior 287/288 (1993) 321

T. Hikita, T. Hanada, M. Kudo and M. Kawai, Structure and electronic state of the TiO_2 and SrO terminated $SrTiO_3$(100) surfaces 287/288 (1993) 377

Y. Kadowaki, K. Aika, H. Kondoh and H. Nozoye, Surface structure of MoS_2(001) determined by coaxial impact-collision ion scattering spectroscopy (CACISS) 287/288 (1993) 396

M. Remškar, A. Prodan and V. Marinković, Charge-density wave modulation in surface layers of TaS_2 and NbS_2 287/288 (1993) 409

G. Hilgers, M. Potthoff, N. Müller and U. Heinzmann, Structural investigations on Xe/Pd(111) with spin-polarized LEED 287/288 (1993) 414

C. Stampfl, J. Burchhardt, M. Nielsen, D.L. Adams, M. Scheffler, H. Over and W. Moritz, The structure of Al(111)–K-($\sqrt{3} \times \sqrt{3}$)R30° determined by LEED: stable and metastable adsorption sites 287/288 (1993) 418

M.A. Van Hove, W. Moritz, H. Over, P.J. Rous, A. Wander, A. Barbieri, N. Materer, U. Starke, D. Jentz, J.M. Powers, G. Held and G.A. Somorjai, Fitting dozens of coordinates by LEED: automated determination of complex surface structures 287/288 (1993) 428

D.J. O'Connor, E.R. Wouters, A.W. Denier van der Gon, J. Vrijmoeth, P.M. Zagwijn, W.F.J. Slijkerman, J.W.M. Frenken and J.F. van der Veen, Oxidation of Al(111) 287/288 (1993) 438

G. Dorenbos and D.O. Boerma, The structure of the Ag(110)-c(6×2)O surface determined with LEIS 287/288 (1993) 443

R. Dippel, K.-U. Weiss, K.-M. Schindler, D.P. Woodruff, P. Gardner, V. Fritzsche, A.M. Bradshaw and M.C. Asensio, Multiple site coincidences and their resolution in photoelectron diffraction: PF_3 adsorbed on Ni(111) 287/288 (1993) 465

C. Mottet, G. Tréglia and B. Legrand, Topology of a Ag monolayer on a Cu(111) substrate: a tight-binding quenched molecular dynamics study 287/288 (1993) 476

E. Landemark, C.J. Karlsson, Y.-C. Chao and R.I.G. Uhrberg, Dimer structure of the Si(001)2×1 and c(4×2) reconstructions derived from core-level and valence-band photoemission results 287/288 (1993) 529

Surface structure (continued)
G. Le Lay, R.L. Johnson, R. Seemann, F. Grey, R. Feidenhans'l and M. Nielsen, Electronic and crystallographic structures of 2D silver adlayers on Ge(111) 287/288 (1993) 539
Y. Teraoka and Y. Tabata, Surface lattice relaxation in chromium 287/288 (1993) 754
H. Yamaguchi and K. Yagi, Current effects on Si(111) surfaces at the phase transition between the 7×7 and the 1×1 structures 287/288 (1993) 820
G. Grübel, D. Gibbs, D.M. Zehner, D.L. Abernathy, A.R. Sandy and S.G.J. Mochrie, Phase behavior of Au and Pt surfaces 287/288 (1993) 842
H. Zimmermann, M. Nold, U. Romahn, H. Göbel, P. von Blanckenhagen and W. Schommers, Steps, point defects and thermal expansion at the Au(110) surface 287/288 (1993) 876
L. Barbier, B. Salanon, J. Sprösser and J. Lapujoulade, Growth and ordering dynamics for Au deposition on Au(110)(2×1) 287/288 (1993) 930
Wei Li and G. Vidali, Growth of metastable high-order commensurate overlayers of Pb on Cu(001) 287/288 (1993) 955
M. Schmidt, H. Wolter, M. Schick, K. Kalki and K. Wandelt, Compression phases in copper/oxygen coadsorption layers on a Ru(0001) surface 287/288 (1993) 983
A. Antonelli, S.N. Khanna and P. Jena, Interplanar relaxation at the (0001) surface of Be 289 (1993) L614
A.M. Rodríguez, G. Bozzolo and J. Ferrante, Multilayer relaxation and surface energies of fcc and bcc metals using equivalent crystal theory 289 (1993) 100
O.M. Magnussen, J. Wiechers and R.J. Behm, In situ scanning tunneling microscopy observations of the potential-dependent (1×2) reconstruction on Au(110) in acidic electrolytes 289 (1993) 139
Y. Huang and J.M. Cowley, Structure of the sulfur-adsorbed $Cu_3Au(110)$ surface 289 (1993) 340
B.I. Craig and P.V. Smith, Monolayer chemisorption of HCl and Cl_2 on the Si(001)2×1 surface 290 (1993) L662
D. Purdie, C.A. Muryn, S. Crook, P.L. Wincott, G. Thornton and D.A. Fischer, Potassium bond site in $ZnO(000\bar{1})p(2\times2)K$ 290 (1993) L680
J. Vrijmoeth, P.M. Zagwijn, E. Vlieg, J.W.M. Frenken and P.F.A. Alkemade, Structure determination of the $NiSi_2(111)$ surface with medium-energy ion backscattering from individual monolayers 290 (1993) 255
A. Atrei, U. Bardi, J.X. Wu, E. Zanazzi and G. Rovida, LEED crystallographic investigation of ultrathin films formed by deposition of Sn on the Pt(111) surface 290 (1993) 286
G.L. Kellogg, The effect of an externally applied electric field on the reconstruction of Pt(110) 290 (1993) 295

Surface tension, see also Surface energy
A.M. Rodríguez, G. Bozzolo and J. Ferrante, Multilayer relaxation and surface energies of fcc and bcc metals using equivalent crystal theory 289 (1993) 100

Surface thermodynamics
I.N. Yakovkin, Monte Carlo simulation of order–disorder transitions in linear structures of alkali and alkaline earth adsorbates 282 (1993) 195
Y. Teraoka and T. Seto, Phase transitions in multiple adsorption layer systems 283 (1993) 371
E. Vives and P.-A. Lindgård, Theory and Monte Carlo simulation of adsorbates on corrugated surfaces 284 (1993) L449
R. Najafabadi and D.J. Srolovitz, Order–disorder transitions at and segregation to (001) Ni–Pt surfaces 286 (1993) 104
L. Hammer, W. Nichtl-Pecher, N. Elbel, W. Stammler, K. Heinz and K. Müller, Phase diagram for hydrogen adsorption on Rh(311) 287/288 (1993) 84
N. Takeuchi, A. Selloni and E. Tosatti, First principles calculations of the cleaved and annealed Ge(111) surfaces 287/288 (1993) 303

Surface thermodynamics (continued)
S.D. Peacor and T. Hibma, LEED study of Na_xWO_3 tungsten bronze: structural relaxation of a perovskite surface 287/288 (1993) 403
J. Alvarez, J.J. Hinarejos, E.G. Michel and R. Miranda, Determination of the Fe/Si(111) phase diagram by means of photoelectron spectroscopies 287/288 (1993) 490
A. Neumann, K. Christmann and T. Solomun, Binding states and structural phase transformations upon iodine adsorption on a gold (100) surface 287/288 (1993) 593
O. Biham, L.-W. Chen and G. Vidali, Models for monolayers adsorbed on a square substrate 287/288 (1993) 815
M. Sokolowski and H. Pfnür, Critical behaviour of the p(2×2) and $(\sqrt{3} \times \sqrt{3})$R30° order–disorder phase transitions of S/Ru(001) 287/288 (1993) 831
G. Bracco, C. Malò, C.J. Moses and R. Tatarek, On the primary mechanism of surface roughening: the Ag(110) case 287/288 (1993) 871
J.-P. Bucher, H. Roeder and K. Kern, Thermally induced disorder and conformational defects of alkane monolayers on graphite 289 (1993) 370
X.-Y. Liu, The solid–fluid interface: a comparison and further description using the layer model 290 (1993) 403
J.A. Prybyla and P.J. Estrup, The effect of surface reconstruction on desorption: H/Mo(100) 290 (1993) 413

Tantalum
R. Vanselow and X.Q.D. Li, Roughening transitions in the vicinal areas of Ta{110} and Ta{100} observed during vapour growth on clean, thermally rounded Ta crystallites 281 (1993) L326
A. Sellidj and B.E. Koel, Growth mechanism and structure of ultrathin Pd films vapor-deposited on Ta(110) 281 (1993) 223
A. Sellidj and B.E. Koel, CO chemisorption properties of ultrathin Pd films on Ta(110) 284 (1993) 139

Tellurium
D.W. Suggs and J.L. Stickney, Studies of the structures formed by the alternated electrodeposition of atomic layers of Cd and Te on the low-index planes of Au. I. LEED and Auger studies 290 (1993) 362
D.W. Suggs and J.L. Stickney, Studies of the surface structures formed by the alternated electrodeposition of Cd and Te on the low-index planes of Au. II. STM studies 290 (1993) 375

Thermal desorption
Y. Ohno, T. Matsushima and H. Miki, Anisotropy in the spatial distribution of reactive carbon dioxide desorption from narrow terraces on a reconstructed iridium (110)(1×2) surface 281 (1993) 234
K.-I. Fukui, T. Aruga and Y. Iwasawa, Chemisorption of CO and H_2 on clean and oxygen-modified Mo(112) 281 (1993) 241
S. Surnev, Interaction of oxygen with a Ge-covered Si(100) surface 282 (1993) 10
B. Sieben and H.P. Bonzel, Adsorption of H_2 and CO on Mn/Fe(110) surfaces 282 (1993) 246
M.A. Schildbach and A.V. Hamza, Clean and water-covered sapphire $(1\bar{1}02)$ surfaces: structure and laser-induced desorption 282 (1993) 306
X. Xu and D.W. Goodman, The preparation and characterization of ultra-thin silicon dioxide films on a Mo(110) surface 282 (1993) 323
J. Matsuo, F. Yannick and K. Karahashi, Reaction kinetics of chlorine on Si(111)7×7 surfaces 283 (1993) 52

Thermal desorption (continued)

T. Matsushima, K. Shobatake and Y. Ohno, Spatial and velocity distributions of product desorption in carbon monoxide oxidation over palladium (110) and reconstructed platinum (110)(1×2) surfaces 283 (1993) 101

M. Nishijima, M. Fujisawa, T. Takaoka and T. Sekitani, The reaction of benzene with Pd(110) and Pd(110)(1×2)–Cs surfaces 283 (1993) 121

Y.-S. Park, J.-S. Bang and J. Lee, Angular distribution of D_2 desorbing from the monodeuteride phase on a Si(100) surface 283 (1993) 209

H. Onishi, T. Aruga and Y. Iwasawa, An unusual adsorption state of hydrogen on the Pd(100)-p(2×2)-p4g-Al bimetallic surface 283 (1993) 213

J. Sakai, G. Mizutani and S. Ushioda, Bonding of O_2, CO_2, and CO on a Cs/p-GaAs(100) surface and its relation to negative electron affinity 283 (1993) 217

K. Domen, N. Akamatsu, H. Yamamoto, A. Wada and C. Hirose, Infrared-visible sum frequency generation study of HCOOH on an MgO(001) surface 283 (1993) 468

X. Xu, J.-W. He and D.W. Goodman, A surface spectroscopic study of metal–support interactions: model studies of copper on thin SiO_2 films 284 (1993) 103

A. Sellidj and B.E. Koel, CO chemisorption properties of ultrathin Pd films on Ta(110) 284 (1993) 139

V. Lossev and J. Küppers, Adsorption of hydrogen on Be(0001) surfaces 284 (1993) 175

A. Cassuto, S. Schmidt and Mane Mane, The interaction of potassium submonolayers adsorbed on Pt(111) with oxygen and the adsorption of ethylene on the resulting modified surfaces: a TDS and UPS study 284 (1993) 273

A. Klekamp and E. Umbach, Physisorption on an epitaxial NaCl(100) double-layer: SF_6 and xenon 284 (1993) 291

A. Ludviksson, C. Huang, H.J. Jänsch and R.M. Martin, Isotopic studies of the reaction of NO on silver surfaces 284 (1993) 328

B.A. Chuikov, V.V. Dvurechenskikh, V.D. Osovskii, Yu.G. Ptushinskii and V.G. Sukretnyi, Adsorption of H_2 and D_2 on W(111) and W(110) surfaces at low temperatures (down to 5 K) 285 (1993) 75

T. Wada, T. Nomura, M. Miyao and M. Hagino, A thermal desorption analysis for the adsorption of CO_2 on GaAs photocathodes 285 (1993) 188

F. Solymosi, A. Berkó and Z. Tóth, Adsorption and dissociation of CH_3OH on clean and K-promoted Pd(100) surfaces 285 (1993) 197

H. Schlichting and D. Menzel, Techniques for wide range, high resolution and precision, thermal desorption measurements. I. Principles of apparatus and operation 285 (1993) 209

Y. Li and M. Bowker, Acetate formation, stabilisation and surface explosion on Rh(111) 285 (1993) 219

A.M. Glines and A.B. Anton, Effects of the hydrogen-induced (1×2) surface reconstruction on the kinetics of ethylene hydrogenation on Ni(110) 286 (1993) 122

V.A. Ukraintsev and I. Harrison, Methane dissociative chemisorption on Pt(111) explored by microscopic reversibility 286 (1993) L571

Z.-M. Liu, X.-L. Zhou, J. Kiss and J.M. White, Interaction of CF_3I with Pt(111) 286 (1993) 233

N. Kizhakevariam and E.M. Stuve, Promotion and poisoning of the reaction of methanol on clean and modified platinum (100) 286 (1993) 246

K.-H. Allers, H. Pfnür, P. Feulner and D. Menzel, Associative desorption of HD and D_2 from a Ni(100) surface: angular and velocity distributions 286 (1993) 297

S. Lapinskas, A. Rosengren and E.E. Tornau, Monte Carlo study of oxygen thermal desorption from $YBa_2Cu_3O_{6+x}$ compound 287/288 (1993) 50

P.B. Rasmussen, P.M. Holmblad, H. Christoffersen, P.A. Taylor and I. Chorkendorff, Dissociative adsorption of hydrogen on Cu(100) at low temperatures 287/288 (1993) 79

Thermal desorption (continued)
A. Atli, M. Abon and J.C. Bertolini, Carbon monoxide adsorption on the (111) and (110) faces of a $Pt_{50}Ni_{50}$ single-crystal alloy 287/288 (1993) 110
D.E.A. Gordon and R.M. Lambert, CO_2 adsorption on oxygen-modified Ni(111) 287/288 (1993) 114
C. Mundt and C. Benndorf, Influence of steps on the H_2O adsorption on Ni(s)(111) 287/288 (1993) 119
J. Ahner and H.-W. Wassmuth, Molecular and dissociative chemisorption and condensation of SO_2 on Cu(111) 287/288 (1993) 125
M. Höfer, H. Stolz and H.-W. Wassmuth, Coadsorption of SO_2 and Cs on Ag(100) 287/288 (1993) 130
P. Gardner, R. Martin, M. Tüshaus, J. Shamir and A.M. Bradshaw, The structure-sensitive adsorption of N_2 on the (1×1) and (5×1) surfaces of Ir{100} 287/288 (1993) 135
U. Schneider, G.R. Castro and K. Wandelt, Adsorption on ordered $Cu_3Pt(111)$: site selectivity 287/288 (1993) 146
C.L.A. Lamont, H. Conrad and A.M. Bradshaw, The photodissociation of methyl bromide chemisorbed on Cu{111}: influence of pre-adsorbed bromine 287/288 (1993) 169
T. Matsushima, Y. Ohno and J.-I. Murakami, Spatial and velocity distributions of desorbing product carbon dioxide over a reconstructed platinum (110)(1×2) surface 287/288 (1993) 192
M.A. Vaksman and A. Ben-Reuven, Surface light-induced drift as a tool for studying gas–surface interactions 287/288 (1993) 196
M.F.H. van Tol, A. Gielbert, R.M. Wolf, A.B.K. Lie and B.E. Nieuwenhuys, The striking difference in the behaviour of Rh and Pt towards their interaction with CO_2 287/288 (1993) 201
I. Chorkendorff, P.B. Rasmussen, H. Christoffersen and P.A. Taylor, The stabilization of adsorbed carbon dioxide by formate on Cu(100) 287/288 (1993) 208
H. Kuramochi, F. Imai, H. Kondoh, K. Kunimori, T. Uchijima and H. Nozoye, Decomposition of cyclopentane on Ni(755): peculiar decomposition behavior of cyclopentane 287/288 (1993) 217
J.P. Warren, X. Zhang, J.E.T. Andersen and R.M. Lambert, Growth of Ce on Rh, surface alloy formation and the preparation and properties of Rh/ceria model planar catalysts 287/288 (1993) 222
D.V. Chakarov, P. Sjövall and B. Kasemo, Vibrational spectra of KO_x complexes on graphite 287/288 (1993) 278
J. Radnik, F. Gitmans, B. Pennemann, K. Oster and K. Wandelt, Adsorbate-induced structure transitions at the reconstructed Pt(100) surface 287/288 (1993) 330
A. Cassuto, Mane Mane, G. Tourillon, P. Parent and J. Jupille, Compared bonding geometries of C_2H_4 and C_3H_6 on K-covered Pt(111) surfaces 287/288 (1993) 460
M. Weinelt, P. Zebisch and H.-P. Steinrück, A multimethod-investigation of the adsorption of ethylene oxide on Ni(110) 287/288 (1993) 471
H. Stolz, M. Höfer and H.-W. Wassmuth, TPD, AES, $\Delta\phi$ and LEED investigations of cesium adsorbed on Ag(100) 287/288 (1993) 564
A. Neumann, K. Christmann and T. Solomun, Binding states and structural phase transformations upon iodine adsorption on a gold (100) surface 287/288 (1993) 593
M. Schick, J. Schäfer, K. Kalki, G. Ceballos, P. Reinhardt, H. Hoffschulz and K. Wandelt, Miscibility within monolayer Ag–Cu films on Ru(0001) 287/288 (1993) 960
D.A. Hutt and D.W. Bassett, Growth of Ir overlayers on a Mo(110) surface 287/288 (1993) 1000
T. Uchikoshi, Y. Sakka, S. Ohno, H. Okuyama and K. Yoshihara, Adsorption of hydrogen on Ni and Ni–TiO_2 composite ultrafine particles 287/288 (1993) 1082
J.A. Rodriguez, The chemical properties of bimetallic surfaces: bonding between CO and Zn on Ru(001) 289 (1993) L584
R. Zhang, A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1

Thermal desorption (continued)
R.D. Ramsier and J.T. Yates, Jr., Thermal and electron-induced behavior of d_6-benzene-chromium-tricarbonyl adsorbed on Ag(111) 289 (1993) 39
S. Tjandra and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255
M.B. Jensen, U. Myler and P.A. Thiel, Local and collective structure of formate on Pt(111) 290 (1993) L655
S.X. Huang, T.S. Rufael and J.L. Gland, Diimide formation on the Ni(100) surface 290 (1993) L673
P. Sjövall and B. Kasemo, A TDS study of oxygen, water and carbon dioxide coadsorption with potassium on graphite 290 (1993) 55
G. Zgrablich, J.L. Sales, R. Uñac and V.P. Zhdanov, The island model of desorption and Langmuir–Hinshelwood relations 290 (1993) 163
R.N. Carter, A.B. Anton and G. Apai, Reactions of π-allyl with atomic oxygen and hydroxyl on Ag(110) 290 (1993) 319

Tin
Y. Yamamoto, RHEED–TRAXS study of superstructures induced by Ge and Sn adsorption on a Si(110) surface 281 (1993) 253
Y. Kimura and K. Takayanagi, Incommensurate phase of Sn/Si(100) studied by HR-REM 283 (1993) 349
A. Dittmar-Wituski and P.J. Møller, Surface spectroscopy from ultrathin α-Sn films on CdTe(110) 287/288 (1993) 577
A. Atrei, U. Bardi, J.X. Wu, E. Zanazzi and G. Rovida, LEED crystallographic investigation of ultrathin films formed by deposition of Sn on the Pt(111) surface 290 (1993) 286

Tin oxide
J. Zhang, B. Heinrich and K. Colbow, Surface observations of fractal patterns on SnO_2 films 286 (1993) 327

Titanium
L. Soriano, M. Abbate, J.C. Fuggle, C. Jiménez, J.M. Sanz, L. Galán, C. Mythen and H.A. Padmore, The interaction of nitrogen with titanium studied by soft X-ray absorption spectroscopy: adsorption versus implantation 281 (1993) 120
Y. Serruys, T. Sakout and D. Gorse, Anodic oxidation of titanium in 1M H_2SO_4, studied by Rutherford backscattering 282 (1993) 279
M. Maline, M. Ducarroir, F. Teyssandier, R. Hillel, R. Berjoan, F.J.J. Van Loo and W. Wakelkamp, Auger electron spectroscopy of compounds in the Si–Ti–C system. Characterization of Si–Ti–C multiphased materials obtained by CVD 286 (1993) 82
S. Takagi and T. Gotoh, Observation of a titanium surface by desorbed ion images with a scanning electron microscope 287/288 (1993) 361
Y. Baba, H. Yamamoto and T.A. Sasaki, Core-level electronic structures of rare-gas atoms implanted in transition metals studied by XPS and XAES 287/288 (1993) 806

Titanium oxide
R. Souda, W. Hayami, T. Aizawa and Y. Ishizawa, Low energy D^+ scattering from clean and alkalated $TiO_2(110)$ surfaces 285 (1993) 265
C. Noguera, J. Goniakowski and S. Bouette-Russo, Electronic structure of clean and hydroxylated oxide surfaces 287/288 (1993) 188
C.L. Greenwood, E.M. Williams, G. Thornton, S.L. Bennett, E. Román, J.L. de Segovia and M.C. Torquemada, An ESD and ESDIAD investigation of $TiO_2(110)$–SO_2 287/288 (1993) 386

Titanium oxide (continued)
A.E. Taverner, P.C. Hollamby, P.S. Aldridge, R.G. Egdell and W.C. Mackrodt, An inverse photoemission study of empty electronic states in TiO_2 287/288 (1993) 653
R. Heise and R. Courths, Examination of the electronic structure of TiO_2(110) using photoelectron diffraction 287/288 (1993) 658
K. Edamoto, T. Anazawa, E. Miyazaki, H. Kato and S. Otani, Chemisorption state of atomic oxygen on TiC(100) surface: angle-resolved photoemission study 287/288 (1993) 667
U. Diebold, J.-M. Pan and T.E. Madey, Ultrathin metal films on TiO_2(110): metal overlayer spreading and surface reactivity 287/288 (1993) 896
T. Uchikoshi, Y. Sakka, S. Ohno, H. Okuyama and K. Yoshihara, Adsorption of hydrogen on Ni and Ni–TiO_2 composite ultrafine particles 287/288 (1993) 1082
L.S. Dake and R.J. Lad, Electronic and chemical interactions at aluminum/TiO_2(110) interfaces 289 (1993) 297
L. Soriano, M. Abbate, J. Vogel, J.C. Fuggle, A. Fernández, A.R. González-Elipe, M. Sacchi and J.M. Sanz, Chemical changes induced by sputtering in TiO_2 and some selected titanates as observed by X-ray absorption spectroscopy 290 (1993) 427

Tungsten
Y. Aiura, H. Yanashima, H. Fukutani, H. Kato, Y. Sakisaka, T. Maruyama and K. Edamoto, Hydrogen-induced reconstruction of a W(110) surface studied by angle-resolved photoemission spectroscopy 283 (1993) 344
H. Müller, R. Hausmann, H. Brenten and V. Kempter, Electrons from intra- and interatomic Auger processes in low-energy grazing collisions of H^+ and H_2^+ with W(110) partially covered by alkali atoms 284 (1993) 129
D.R. Mullins and P.F. Lyman, Sulfur-induced changes in the W(001) surface core level shift 285 (1993) L473
B.A. Chuikov, V.V. Dvurechenskikh, V.D. Osovskii, Yu.G. Ptushinskii and V.G. Sukretnyi, Adsorption of H_2 and D_2 on W(111) and W(110) surfaces at low temperatures (down to 5 K) 285 (1993) 75
M. Sato, Ion current characteristics of an Ar field ionization source 285 (1993) L525
P. Hu, A. Wander, L. Morales de la Garza, M.P. Bessent and D.A. King, An adsorbate-stabilised vacancy structure for Cu on W{100}: a surface alloy 286 (1993) L542
N.T. Barrett, B. Villette, A. Senhaji, C. Guillot, R. Belkhou, G. Tréglia and B. Legrand, Experimental study of the growth and dissolution of Re/W(110) by core level photoemission spectroscopy: formation of a surface alloy 286 (1993) 150
Y.B. Zhao, J.E. Whitten and R. Gomer, Electron stimulated desorption of hydrogen from W(110) 286 (1993) 290
K. Bärwinkel and L. Rottmann, A model for irreversible scattering of gas atoms on a metal surface 287/288 (1993) 35
K. Ota and S. Usami, Study on the adsorption of oxygen and nitrogen on a W(100) surface with an analysis of electron energy-loss fine structure 287/288 (1993) 99
T. Miyake and S. Yamamoto, Diffractive scattering of a helium molecular beam from monatomic layers on a W(110) surface 287/288 (1993) 340
Y. Hirai, Total-energy distribution of field-emitted electrons from a W(100) surface 287/288 (1993) 605
T.E. Madey, J. Guan, C.-Z. Dong and S.M. Shivaprasad, Morphological instabilities induced by ultrathin films on W(111) 287/288 (1993) 826
E. Hulpke and J. Lüdecke, The giant surface phonon anomaly on hydrogen saturated W(110) and Mo(110) 287/288 (1993) 837
Y.-W. Yang, J.C. Lin and T. Engel, Desorption kinetics of CO from epitaxial Pd films on W(110) in the low coverage limit 289 (1993) 267
B. Weimert, J. Noffke and L. Fritsche, Electronic and magnetic properties of a Co-monolayer on a W(110) substrate 289 (1993) 397

Tunneling

G. Watel, F. Thibaudau and J. Cousty, Direct observation of long chain alkane bilayer films on graphite by scanning tunneling microscopy 281 (1993) L297

F. Thibaudau, G. Watel and J. Cousty, Scanning tunneling microscopy imaging of alkane bilayers adsorbed on graphite: mechanism of contrast 281 (1993) L303

M. Shinn, P.B. Mirkarimi and S.A. Barnett, Nucleation of lattice-mismatched transition-metal nitride films: limitations on superlattice growth 281 (1993) 1

P. Molinàs-Mata and J. Zegenhagen, Defects of Ge(111)-c(2×8) – structural and electronic characterization 281 (1993) 10

M.J. Gallagher, D. Chen, B.P. Jacobsen, D. Sarid, L.D. Lamb, F.A. Tinker, J. Jiao, D.R. Huffman, S. Seraphin and D. Zhou, Characterization of carbon nanotubes by scanning probe microscopy 281 (1993) L335

C. Girard, C. Joachim, C. Chavy and P. Sautet, The electric field under a STM tip apex: implications for adsorbate manipulation 282 (1993) 400

J.W.M. Frenken, H.M. van Pinxteren and L. Kuipers, New views on surface melting obtained with STM and ion scattering 283 (1993) 283

W. Raunau, H. Niehus and G. Comsa, Epitaxial iron silicides on Si(001): an investigation with scanning tunneling microscopy and spectroscopy 284 (1993) L375

Z.F. Liu, A. Manivannan, H. Yanagi, M. Ashida, A. Fujishima and H. Inokuchi, Direct observation of the secondary structure of unfolded pseudomonas-cytochrome c_{551} by scanning tunneling microscopy 284 (1993) L411

J.A. Meyer, Extraction of information contained in scanning tunneling microscope images 284 (1993) L416

X. Bao, J.V. Barth, G. Lehmpfuhl, R. Schuster, Y. Uchida, R. Schlögl and G. Ertl, Oxygen-induced restructuring of Ag(111) 284 (1993) 14

L. Andersohn and U. Köhler, In situ observation of water adsorption on Si(100) with scanning tunneling microscopy 284 (1993) 77

E. Kopatzki, S. Günther, W. Nichtl-Pecher and R.J. Behm, Homoepitaxial growth on Ni(100) and its modification by a preadsorbed oxygen adlayer 284 (1993) 154

H. Itoh, S. Narui, H. Tanabe and T. Ichinokawa, Nucleation and surface reconstruction of Pd on Si(100) observed by scanning tunneling microscopy 284 (1993) 236

A.J. Mayne, A.R. Avery, J. Knall, T.S. Jones, G.A.D. Briggs and W.H. Weinberg, An STM study of the chemisorption of C_2H_4 on Si(001)(2×1) 284 (1993) 247

N. Motta, A. Sgarlata, G. Gaggiotti, F. Patella, A. Balzarotti and M. De Crescenzi, Iron disilicide growth on Si(111): a scanning tunneling microscopy investigation 284 (1993) 257

H.-X. You, N.M.D. Brown and K.F. Al-Assadi, Radio-frequency (RF) plasma etching of graphite with oxygen: a scanning tunneling microscope study 284 (1993) 263

G. Tarrach, D. Bürgler, T. Schaub, R. Wiesendanger and H.-J. Güntherodt, Atomic surface structure of Fe_3O_4(001) in different preparation stages studied by scanning tunneling microscopy 285 (1993) 1

G.W. Lloyd and D.P. Woodruff, Do oxygen-induced Cu(410) facets reconstruct? 285 (1993) L503

Y. Liang and D.A. Bonnell, Atomic structures of reduced $SrTiO_3$(001) surfaces 285 (1993) L510

P. Badziag and W.S. Verwoerd, Quantum chemical modeling of the scanning tunneling microscope 285 (1993) 145

E.A. Eklund, E.J. Snyder and R.S. Williams, Correlation from randomness: quantitative analysis of ion-etched graphite surfaces using the scanning tunneling microscope 285 (1993) 157

K. Kobayashi, T. Suzuki and M. Tsukada, Theory of tip–surface gap dependence in laser-assisted scanning tunneling microscopy 285 (1993) 181

J. Wintterlin and Ph. Avouris, Hydrogen effects in CVD: selective etching and metastable phases 286 (1993) L529

Tunneling (continued)
H. Yu, J. Yan, Y. Li, W.S. Yang, Z. Gu and Y. Wu, Scanning tunneling microscopy of C_{60} on graphite 286 (1993) 116
V.M. Hallmark and S. Chiang, Imaging structural details in closely related molecular adsorbate systems 286 (1993) 190
W. Raunau, H. Niehus, Th. Schilling and G. Comsa, Scanning tunneling microscopy and spectroscopy of iron silicide epitaxially grown on Si(111) 286 (1993) 203
J. Harris and A.C. Luntz, On tunneling-dissociation at surfaces 287/288 (1993) 56
M. Remškar, A. Prodan and V. Marinković, Charge-density wave modulation in surface layers of TaS_2 and NbS_2 287/288 (1993) 409
V. Bressler-Hill, R. Maboudian, M. Wassermeier, X.-S. Wang, K. Pond, P.M. Petroff and W.H. Weinberg, Surface morphology of MBE-grown GaAs(001)-(2×4) and GaAs(001)-faceted surfaces investigated by scanning tunneling microscopy 287/288 (1993) 514
M.W.J. Prins, D.L. Abraham and H. van Kempen, Photo-assisted tunneling at ferromagnet/semiconductor interfaces 287/288 (1993) 750
Ph. Ebert and K. Urban, Step smoothing and surface vacancy reactions on InP(110) and GaP(110) observed by scanning tunneling microscopy 287/288 (1993) 891
J.A. Martin-Gago, J. Díaz, S. Ferrer and F. Comin, STM studies of Si evaporation on Si at RT by laser ablation 287/288 (1993) 911
S. Rousset, S. Chiang, D.E. Fowler and D.D. Chambliss, Epitaxial growth of Au on Ag(110) studied by scanning tunneling microscopy 287/288 (1993) 941
A. Brodde and H. Neddermeyer, Scanning tunneling microscopy on the growth of Fe films on Cu(100) 287/288 (1993) 988
M. Tsukada, K. Kobayashi, N. Isshiki, H. Kageshima, T. Uchiyama, S. Watanabe and T. Schimizu, Novel features of surface electronic structure revealed by the theoretical simulation of scanning tunneling microscopy/spectroscopy 287/288 (1993) 1004
T. Ide, A. Yamashita and T. Mizutani, STM observation of growth interruption effect of MBE growth 287/288 (1993) 1013
H. Sirringhaus, N. Onda, E. Müller-Gubler, P. Müller, St. Zehnder and H. von Känel, Fundamental phenomena in heteroepitaxial growth studied by scanning tunneling microscopy 287/288 (1993) 1019
T. Yasue, T. Koshikawa, H. Tanaka and I. Sumita, Initial stage of Cu growth on Si(111)7×7 surface studied by scanning tunneling microscopy 287/288 (1993) 1025
S. Watanabe, M. Aono and M. Tsukada, Theoretical calculations of STM images of the Si(111)$\sqrt{3} \times \sqrt{3}$–Ag and –Sb surfaces 287/288 (1993) 1036
H. Uchida, D.H. Huang, J. Yoshinobu and M. Aono, Single-atom manipulation on the Si(111)7×7 surface by the scanning tunneling microscope (STM) 287/288 (1993) 1056
S.N. Molotkov, Theory of new modes for STM operation 287/288 (1993) 1098
A.R.H.F. Ettema, C. Haas, P. Moriarty and G. Hughes, Wave function imaging of the PbS(001) surface with scanning tunneling microscopy 287/288 (1993) 1106
H. Niehus and C. Achete, Surface structure investigation of nitrogen and oxygen on $Cu_3Au(100)$ 289 (1993) 19
O.M. Magnussen, J. Wiechers and R.J. Behm, In situ scanning tunneling microscopy observations of the potential-dependent (1×2) reconstruction on Au(110) in acidic electrolytes 289 (1993) 139
R. Laiho and H.J. Reittu, Theory of scanning tunneling microscopy with spin-polarized electrons obtained from a semiconducting tip 289 (1993) 363
J.-P. Bucher, H. Roeder and K. Kern, Thermally induced disorder and conformational defects of alkane monolayers on graphite 289 (1993) 370
L. Seehofer, G. Falkenberg and R.L. Johnson, STM study of the structure and phases of Pb on Ge(111) 290 (1993) 15

Tunneling (continued)
K.L. Sebastian and G. Doyen, Electrochemical scanning tunneling microscopy: does the orientational polarization of the liquid play any role? 290 (1993) L703
K. Ikeda, K. Takamuku, R. Itti and N. Koshizuka, Atomic resolution STM observation of the Bi–O surface of yttrium substituted $Bi_2Sr_2CaCu_2O_y$ single crystals 290 (1993) 207
K.E. Johnson, P.K. Wu, M. Sander and T. Engel, The mesoscopic and microscopic structural consequences from decomposition and desorption of ultrathin oxide layers on Si(100) studied by scanning tunneling microscopy 290 (1993) 213
D.W. Suggs and J.L. Stickney, Studies of the surface structures formed by the alternated electrodeposition of Cd and Te on the low-index planes of Au. II. STM studies 290 (1993) 375

Vanadium
K. Nakayama and S. Usami, LEED and EELS studies on vanadium (110) and (111) single crystal surfaces 287/288 (1993) 355
K. Kishi, K. Hirai and T. Yamamoto, XPS and XAES study for oxidation of V/Cu(100) and V, Na/Cu(100) surfaces 290 (1993) 309

Water
S. Kittaka, T. Sasaki, N. Fukuhara and H. Kato, Fourier transform infrared spectroscopy of H_2O molecules on the Cr_2O_3 surface 282 (1993) 255
M.A. Schildbach and A.V. Hamza, Clean and water-covered sapphire ($1\bar{1}02$) surfaces: structure and laser-induced desorption 282 (1993) 306
L. Andersohn and U. Köhler, In situ observation of water adsorption on Si(100) with scanning tunneling microscopy 284 (1993) 77
K. Jacobi and U. Myler, Chemisorption of H, H_2O and C_2H_4 on Si(113): implications for the structure 284 (1993) 223
I. Al-Hayek and Ş. Katircioglu, Water adsorption on the Si(110) surface 286 (1993) 92
T. Gotoh and S. Takagi, Angular distribution of ions desorbed from clean and H_2O-exposed MgO(001) by electron stimulation 287/288 (1993) 31
C. Mundt and C. Benndorf, Influence of steps on the H_2O adsorption on Ni(s)(111) 287/288 (1993) 119
M. Canepa, P. Cantini, L. Mattera, M. Salvietti, S. Terreni and F. Valdenazzi, Water dissociation on O($n\times1$)–Ag(110) phases 287/288 (1993) 273
U. Starke, N. Materer, A. Barbieri, R. Döll, K. Heinz, M.A. Van Hove and G.A. Somorjai, A low-energy electron diffraction study of oxygen, water and ice adsorption on Pt(111) 287/288 (1993) 432
W. Kuch, M. Schulze, W. Schnurnberger and K. Bolwin, XPS lineshape analysis of potassium coadsorbed with water on Ni(111) 287/288 (1993) 600
R. Zhang, A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1
J. Prasad, E. Murray and J.A. Kelber, Site selective chemistry of S, Cl and H_2O at the iron oxide surface 289 (1993) 10
P. Sjövall and B. Kasemo, A TDS study of oxygen, water and carbon dioxide coadsorption with potassium on graphite 290 (1993) 55

Work function
S. Surnev, Interaction of oxygen with a Ge-covered Si(100) surface 282 (1993) 10
H.H. Rotermund, Investigation of dynamic processes in adsorbed layers by photoemission electron microscopy (PEEM) 283 (1993) 87
K.M. Hock and R.E. Palmer, Temperature dependent behaviour in the adsorption of submonolayer potassium on graphite 284 (1993) 349

Work function (continued)
A. Hamawi and L. Walldén, Quantum size effect for Na films on Si(100) 285 (1993) 93
Th. Rodach, K.-P. Bohnen and K.M. Ho, First principles calculations of lattice relaxation at low index surfaces of Cu 286 (1993) 66
A. Atli, M. Abon and J.C. Bertolini, Carbon monoxide adsorption on the (111) and (110) faces of a $Pt_{50}Ni_{50}$ single-crystal alloy 287/288 (1993) 110
C. Mundt and C. Benndorf, Influence of steps on the H_2O adsorption on Ni(s)(111) 287/288 (1993) 119
M. Alnot and J.J. Ehrhardt, Pt(110)(1×1) surfaces prepared by low temperature platinum deposition: surface characterization and stability 287/288 (1993) 325
M. Weinelt, P. Zebisch and H.-P. Steinrück, A multimethod-investigation of the adsorption of ethylene oxide on Ni(110) 287/288 (1993) 471
L.S.O. Johansson and B. Reihl, Alkali metals on Si(100)2×1: comparative study of the surface electronic structures for Li, Na and K adsorption 287/288 (1993) 524
H. Stolz, M. Höfer and H.-W. Wassmuth, TPD, AES, $\Delta\phi$ and LEED investigations of cesium adsorbed on Ag(100) 287/288 (1993) 564
A. Neumann, K. Christmann and T. Solomun, Binding states and structural phase transformations upon iodine adsorption on a gold (100) surface 287/288 (1993) 593
S. Crampin, M. Nekovee, J.B.A.N. van Hoof and J.E. Inglesfield, Subvolume embedding for interfacial electronic structure 287/288 (1993) 732
M. Schmidt, H. Wolter, M. Schick, K. Kalki and K. Wandelt, Compression phases in copper/oxygen coadsorption layers on a Ru(0001) surface 287/288 (1993) 983
F.J. Esposto, C.-S. Zhang, P.R. Norton and R.S. Timsit, Segregation studies of an Al–Li alloy 290 (1993) 93
C.-S. Zhang, F.J. Esposto, B.J. Flinn, P.R. Norton and R.S. Timsit, The influence of Li surface segregation on the initial oxidation of an Al–Li alloy at room temperature 290 (1993) 103

X-ray absorption
L. Soriano, M. Abbate, J.C. Fuggle, C. Jiménez, J.M. Sanz, L. Galán, C. Mythen and H.A. Padmore, The interaction of nitrogen with titanium studied by soft X-ray absorption spectroscopy: adsorption versus implantation 281 (1993) 120
D.P. Woodruff, Structural studies of adsorbed and coadsorbed molecular species 283 (1993) 309
P.S. Mangat, S.T. Kim, K.M. Choudhary, Z. Hurych and P. Soukiassian, Polarization-dependent photoemission EXAFS investigation of the InP(110) surface structure 285 (1993) 102
A. Morgante, D. Cvetko, A. Santoni, K.C. Prince, V.R. Dhanak, G. Comelli and M. Kiskinova, A synchrotron radiation study of NO and oxygen on Rh(110) 285 (1993) 227
K. Newstead, A.W. Robinson, S. d'Addato, A. Patchett, N.P. Prince, R. McGrath, R. Whittle, E. Dudzik and I.T. McGovern, An X-ray absorption fine structure study of Ge(001)(2×1)–S 287/288 (1993) 317
A. Cassuto, Mane Mane, G. Tourillon, P. Parent and J. Jupille, Compared bonding geometries of C_2H_4 and C_3H_6 on K-covered Pt(111) surfaces 287/288 (1993) 460
Y.U. Idzerda, L.H. Tjeng, H.-J. Lin, C.J. Gutierrez, G. Meigs and C.T. Chen, Magnetic structure of Fe/Cr/Fe trilayers 287/288 (1993) 741
Han Xu, P. Uvdal, C.M. Friend and J. Stöhr, The adsorption structure of 2, 5-dihydrothiophene on Mo(110)-(4×1)-S: ring orientation as determined by NEXAFS 289 (1993) L599
L. Spiess, P.S. Mangat, S.-P. Tang, K.M. Schirm, A.J. Freeman and P. Soukiassian, Combined theoretical and experimental determination of the atomic structure and adsorption site of Na on the Si(100)2×1 surface 289 (1993) L631
D. Purdie, C.A. Muryn, S. Crook, P.L. Wincott, G. Thornton and D.A. Fischer, Potassium bond site in $ZnO(000\bar{1})p(2\times2)K$ 290 (1993) L680

X-ray absorption (continued)
L. Soriano, M. Abbate, J. Vogel, J.C. Fuggle, A. Fernández, A.R. González-Elipe, M. Sacchi and J.M. Sanz, Chemical changes induced by sputtering in TiO_2 and some selected titanates as observed by X-ray absorption spectroscopy 290 (1993) 427

X-ray diffraction
M. Shinn, P.B. Mirkarimi and S.A. Barnett, Nucleation of lattice-mismatched transition-metal nitride films: limitations on superlattice growth 281 (1993) 1
T. Takahashi and S. Nakatani, Refinement of the Si(111)$\sqrt{3} \times \sqrt{3}$–Ag structure by surface X-ray diffraction 282 (1993) 17
U. Bardi, A. Atrei, B. Cortigiani, G. Rovida and M. Torrini, X-ray photoelectron diffraction study of an oxidized Pt–Co(001) alloy surface: evidence for atomic scale rippling of the CoO overlayer 282 (1993) L365
M. Miki-Yoshida, L. Rendón, S. Tehuacanero and M. José-Yacamán, Icosahedral, decahedral and single faulted particles obtained from carbon soot 284 (1993) L444

X-ray reflection
V. Eteläniemi, E.G. Michel and G. Materlik, RbBr/Si(111) interface studied by the X-ray standing wave method 287/288 (1993) 288

X-ray scattering
T. Niwa, M. Sugiyama, T. Nakahata, O. Sakata and H. Hashizume, Structure of fluoride/GaAs(111) heteroepitaxial interfaces 282 (1993) 342
D.L. Abernathy, D. Gibbs, G. Grübel, K.G. Huang, S.G.J. Mochrie, A.R. Sandy and D.M. Zehner, Reconstruction of the (111) and (001) surfaces of Au and Pt: thermal behavior 283 (1993) 260
S. Ferrer, Phase information in the crystal truncation rods 286 (1993) L564
C.A. Lucas, G.C.L. Wong, C.S. Dower, F.J. Lamelas and P.H. Fuoss, Initial stages in the epitaxial growth of NaCl on Ge(001) 286 (1993) 46
A.R. Sandy, S.G.J. Mochrie, D.M. Zehner, G. Grübel, K.G. Huang and D. Gibbs, Au(111) and Pt(111) surface phase behavior 287/288 (1993) 321
G. Grübel, D. Gibbs, D.M. Zehner, D.L. Abernathy, A.R. Sandy and S.G.J. Mochrie, Phase behavior of Au and Pt surfaces 287/288 (1993) 842

Yttrium
A. Mesarwi and A. Ignatiev, Interaction of Y overlayers with the GaAs(100) surface and oxidation of the Y/GaAs interface 282 (1993) 371

Zeolites
A. Tonscheidt, P.L. Ryder, N.I. Jaeger and G. Schulz-Ekloff, Orientation and morphology of iridium, rhodium and platinum nanocrystals in zeolite X 281 (1993) 51
L. Scandella, N. Kruse and R. Prins, Imaging of zeolite surface structures by atomic force microscopy 281 (1993) L331
C. Hirose, Y. Goto, N. Akamatsu, J. Kondo and K. Domen, Measurement of vibrational energy relaxation of a surface hydroxyl group by ultrashort tunable infrared pulses 283 (1993) 244

Zinc oxide
G. Ghiotti, A. Chiorino and F. Boccuzzi, Surface chemistry and electronic effects of H_2 (D_2) on two different microcrystalline ZnO powders 287/288 (1993) 228
R. Zhang, A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1

Zinc oxide (continued)
P.J. Møller, S.A. Komolov and E.F. Lazneva, Laser-induced CO_2 desorption from a CO/Cu/ZnO(0001) surface 290 (1993) L677
D. Purdie, C.A. Muryn, S. Crook, P.L. Wincott, G. Thornton and D.A. Fischer, Potassium bond site in ZnO(000$\bar{1}$)p(2×2)K 290 (1993) L680

List of terms used in the subject index

Acetylene
Adhesion
Adsorption isotherms
Alkali halides
Alkali metals
Alkanes
Alloys
Aluminium
Aluminium oxide
Ammonia
Arsenic
Atomic and molecular beam studies
Atomic force microscopy
Auger electron spectroscopy

Band structure
Barium
Benzene
Beryllium
Biological compounds
Bismuth
Borides
Boron
Boron nitride

Cadmium
Cadmium telluride
Calcium
Carbides
Carbon
Carbon dioxide
Carbon monoxide
Carboxylic acid
Chalcogens
Chemical vapour deposition
Chemisorption theory
Chromium
Clusters
Cobalt
Computer simulations
Conductivity
Copper

Deuterium
Diamond
Dielectric constant
Diffusion

Electron diffraction
Electron emission
Electron energy loss spectroscopy
Electron microscopy
Electron scattering
Electron stimulated desorption
Ellipsometry
Epitaxy
Etching
Ethylene

Faceting
Field emission
Field emission microscopy
Field evaporation
Field ion microscopy
Field ionisation

Gallium
Gallium arsenide
Gallium phosphide
Germanium
Glass
Gold
Graphite

Halides
Halogens
Heterostructures
Hydrogen

Ice
Indium
Indium antimonide
Indium arsenide
Indium phosphide
Infrared spectroscopy
Inorganic compounds

Ion bombardment
Ion implantation
Ion scattering
Iridium
Iron
Iron oxide

Lanthanides
Lead
Low energy electron diffraction
Luminescence

Magnesium oxide
Magnetic measurements
Manganese
Magnetic structures
Mercury
Metals
Methane
Methanol
Mica
Molecular beam epitaxy
Molybdenum
Mössbauer spectroscopy

Neutron scattering
Nickel
Nickel oxide
Niobium
Nitric oxide
Nitrides
Nitrogen
Nitrous oxide
Noble gases

Organic substances
Oxidation
Oxides
Oxygen

Palladium
Photodesorption
Photoelectron spectroscopy
Photon emission
Physisorption
Platinum
Polymers
Positron spectroscopy

Raman scattering
Reflection spectroscopy
Rhenium
Rhodium
Ruthenium

Second harmonic generation
Secondary ion mass spectroscopy
Selenium
Semiconductors
Silicides
Silicon
Silicon carbide
Silicon dioxide
Silicon oxide
Silver
Solid–electrolyte interface
Sputtering
Strontium
Sulphides
Sulphur
Sulphur dioxide
Superconductivity
Superlattices
Surface conductivity
Surface defects
Surface diffusion
Surface energy
Surface melting
Surface morphology
Surface phonons and adsorbate vibrations
Surface plasmons
Surface roughness
Surface segregation
Surface states and interface states
Surface stress
Surface structure
Surface tension
Surface thermodynamics

Tantalum
Tellurium
Thermal desorption
Tin
Tin oxide
Titanium
Titanium oxide
Tungsten
Tunneling

Vanadium
Water
Work function
X-ray absorption
X-ray diffraction
X-ray reflection
X-ray scattering
Yttrium
Zeolites
Zinc oxide

REQUIREMENTS FOR SWIFT PUBLICATION

Submission: *Contributions* must be written in English. **They should be submitted in triplicate with original drawings of the figures** (no larger than ca. 20×30 cm) and an abstract in English. All manuscripts, other than Letters, originating in Germany and Austria, should be submitted to the Regional Editor in Germany. All manuscripts, other than Letters, originating in European Countries, other than those mentioned above, as well as those originating in Africa, should be submitted to the Regional Editor in the UK. All manuscripts, other than Letters, originating in Japan, should be submitted to the Regional Editor in Japan. All manuscripts originating in North and South America, in Asia (except Japan), in Australia or New Zealand, should be submitted to the Editor.
All Surface Science Letters regardless of country of origin, should be submitted directly to the Editor.

Refereeing: *The authors are encouraged to list the names (addresses and telephone numbers) of three to four individuals who are qualified to serve as referees for their paper*. The proposed referees should preferably reside in the same country or continent as the Editor or Regional Editor to whom the paper is submitted. The referees selected will not necessarily be from the list suggested by the author. Failure to provide complete data on several suggested referees may delay processing of the manuscript.

Copyright transfer: The submission of a paper will be taken to imply that the author has satisfied himself that no copyright will thereby be infringed. Upon acceptance of an article by this journal the author(s) will be asked to transfer copyright of the article to the Publisher. This transfer will ensure the widest possible dissemination of information.

Publication speed: To qualify for rapid publication in **Surface Science Letters** manuscripts should not exceed 2000 words in length, excluding abstract, list of references and a maximum of 5 tables or figures which will be counted as separate.

Preparation of manuscripts: The following are the stylistic requirements for a manuscript.

(1) *Manuscripts* should be typed throughout with double line spacing and wide margins on numbered pages.

(2) *Title page(s)* should contain, in addition to the article title, author(s)' names and affiliations, the text of related footnotes and the text of the abstract. Indicate which author will act as contact author and provide FAX No., telephone No. and telex No., if available. Failure to be able to contact the author by FAX can result in significant delays in processing the manuscript.

(3) *Tables* should be typed on separate sheets at the end of the manuscript. In addition to its serial number, each table should have a sufficiently detailed heading or caption to explain the data displayed in it.

(4) *Figures* should be numbered and their captions listed together at the end of the manuscript. Each figure should have a sufficiently detailed caption explaining the data displayed. A set of good quality drawings and photographs is required to produce the printed line figures and half-tone plates in the journal. Photographic copies ("glossy prints") of drawings are also acceptable for the line figures if they have been sharply focused and evenly exposed. **As a rule, Xerox copies cannot be accepted**. Original drawings and photographs will be returned after publication of the paper.

(4a) *Line figures*: The drawings or glossy prints supplied for the line figures should be 1.5–3 times larger than the printed size of the figures and should contain all the required, carefully applied lettering.
Figures are preferably reduced to a single column width (7.6 cm) unless their complexity, large width-to-height ratio, or need to display special detail makes a larger format necessary (max. printed width ~ 20 cm). Inappropriately sized lettering on a figure may prevent its reduction to the size optimum for its information content. The lettering used on a drawing should be chosen so that after reduction, the height of numbers and (capital) letters falls within the range 1.2–2.4 mm. Care should be exercised in choosing the pen width of machine-plotted graphs. Frequently lines in these figures are too fine compared to the area of the figure.
Shaded areas in line figures should be shown by means of cross-hatching (or a matrix of dots) rather than a continuous grey "wash". Cross-hatching, after reduction, of density less than ~ 25 lines/cm is satisfactory.

(4b) *Half-tone plates*: Photographs supplied for reproduction should be unmounted unless they form part of a composite figure and they should have a somewhat greater contrast than is desired in the printed figure. It is important that the photographs supplied are not screened (overprinted with the point-matrix used by printers) or moiré patterns will form when they are screened for a second time. When necessary, the top side of a photograph should be marked on the back. A reduction factor should be recommended for a photo when it is not obvious what detail in the photo is of interest.

(4c) *Colour plates*: Illustrations can be printed in colour when they are judged by the Editor to be essential to the presentation. The Publisher and the author will each bear part of the extra costs involved. Further information concerning colour illustrations and the costs to the author can be obtained from the Publisher.

(5) *References* in the text to other publications should be numbered consecutively within square brackets, for example: "... and Chang and Weaver [1] show ..." and listed together at the end of the text, for example:
[1] S.-C. Chang and M.J. Weaver, Surf. Sci. 241 (1991) 11.
[2] S.J. Hoekje and G.B. Hoflund, Appl. Surf. Sci. 47 (1991) 43.
[3] F.J. Himpsel, Surf. Sci. Rep. 12 (1990) 1.
[4] A. Roth, Vacuum Technology, 3rd ed. (North-Holland, Amsterdam, 1990).
[5] V. Celli, in: Dynamical Properties of Solids, Vol. 6, Eds. G.K. Horton and A.A. Maradudin (North-Holland, Amsterdam, 1990) p. 337.

References to unpublished or not readily accessible reports should be avoided. In the case of multiple authorship all authors should be listed in the references provided they number less than ten. Only in the case of more than ten authors is the first author et al. acceptable.

(6) *Formulae* in the manuscript should be typed with particular consideration given to characters that may be misinterpreted, e.g.

I (cap.), l (el), 1 (one), ′ (prime)	c, C; k, K, κ (kappa); p, P, ρ (rho)
o (lower case), O (cap.), 0 (zero), ° (deg)	u, v (lower case), ν (nu), V (cap.)
× (times), x (lower case), X (cap.)	Σ (sigma), Σ (sum), Π (pi), Π (product); etc.

If necessary, unusual symbols should be explained in pencil in the margin.

(7) *Vectors* should be indicated by a wavy underlining, and will be printed in bold-face italics.

Delay in publication might occur if the above requirements are not met.

Submission of electronic text: The final text may be submitted on a 3.5″ or 5.25″ diskette (*in addition to a hard copy with original figures*). Both double density and high density diskettes are acceptable, but they should be formatted according to their capacity before the files are copied onto them. The main text, list of reference, tables and figure legends should be stored in separate text files with clearly identifiable file names. The format of these files depends on the wordprocessor used. It is essential that the name and version of the wordprocessing program, type of computer on which the text was prepared, and format of the text files are clearly indicated. The final manuscript may contain parts (e.g., formulae, complex tables) or last minute corrections which are not included in the electronic text. This should be clearly marked in the additional hard copy.

Page charge and reprints: There is **no** page charge. Reprints may be ordered from the publisher. An order form will be sent to contributors together with the proofs. 50 reprints of the article will be supplied free of charge.

surface science

MASTER INDEX
Volumes 281–290

Author index	1
Subject index	57
List of terms used in the subject index	151

0039-6028(1993)281/290;1-F